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- Filming 'Viva Zapata!'

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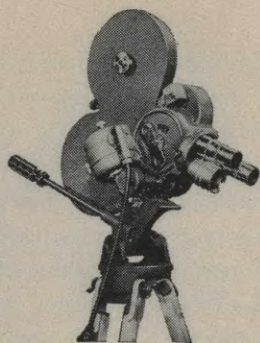
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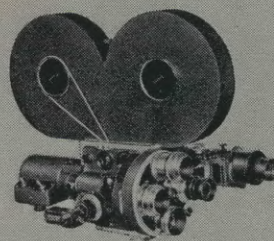
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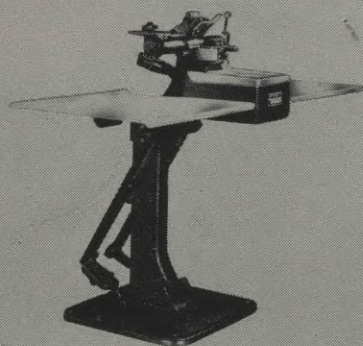
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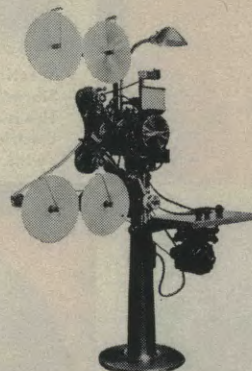
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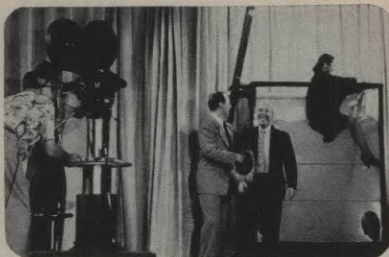
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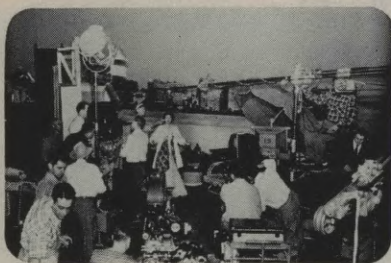
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Ralph Edwards shoots his "Truth or Consequences" show with four Mitchell 35mm cameras. The program is filmed "live" in New York for later release on TV networks.



Westinghouse Electric Corp.'s "Summer Storm" is filmed by Ronald Reed Prod., Inc. This is one of over 130 films for Westinghouse Electric Corp. by this producer—all filmed with 16mm and 35mm Mitchell Cameras.



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THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY
PUBLICATION OF AMERICAN SOCIETY OF CINEMATOGRAPHERS

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ON THE COVER

JOHN BOYLE, A.S.C., (2nd from left) and his camera crew that photographed in 16mm color the complete Academy Awards Presentation Ceremonies from balcony of the RKO-Pantages theatre in Hollywood the evening of March 20. From left to right are cameraman Roger Sumner, Boyle, operator Roy Clark, Maynard Rugg, and camera assistant Robert R. Hosler. For technical data regarding the filming assignment, see the Bulletin Board column in this issue.

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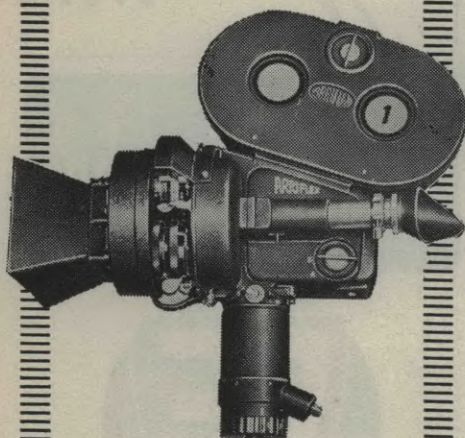
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Hollywood Bulletin Board



JOSEPH WALKER, A.S.C., (right) last month was presented with Modern Photography magazine's Award of Excellence for the photography of Columbia Picture's "The Marrying Kind." Presentation was made by publication's Hollywood representative Edmund Kerr.

Eastman Kodak Company, through the courtesy of Emery Huse, A.S.C., executive of the motion picture division of the Hollywood branch, made a gift to the Academy of Motion Picture Arts and Sciences of the necessary 16mm Kodachrome footage for filming the actual Awards presentation ceremony last month.

The motion picture was produced for the Academy by G. Carleton Hunt. The photography was directed by John Boyle, A.S.C. Both are members of the Academy's Board of Governors.

Boyle and his staff employed four 16mm sound cameras—2 Maurers and 2 Mitchells. All four cameras were fitted with special 235° shutters in order to give an exposure of 1/37th second with the available light.

Special arc spots were installed in the theatre to furnish illumination for the motion picture photography. Two lamps were placed at either side of the balcony at the rail, and two in the projection booth. Maximum illumination obtained was 750 foot candles.

Two cameras were in operation during the entire ceremony, with two standing by to take over when film in the other two ran low. One camera thus would shoot closeups with a telephoto lens, while the other recorded long shots.

Boyle employed a telephone intercom system between his camera operators in order to relay instructions as filming

progressed and to keep track of the footage.

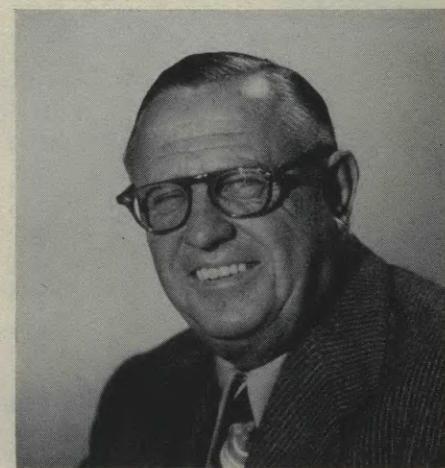
Approximately 6000 feet of film were exposed. This will be edited down to about an hour and a half screen time. The picture, made for the Academy's archives, will be given its premiere screening before Academy members sometime early this month.

Guy Roe, A.S.C., departed for India March 18, where he will direct the photography on a production to be made there by Cascade Pictures. Home base of company is Hal Roach Studios, Culver City.

Fred W. Jackman, executive vice-president of the American Society of Cinematographers, returned to his desk in mid-March following a brief hospitalization.

Devereux Jennings, A.S.C., 67, veteran cinematographer, died March 12 after a lingering illness at the home of his brother Gordon Jennings, A.S.C., head of Paramount Studio's special photographic effects department.

Veteran of the one-reel era of silent movies, Jennings photographed many early features for Paramount, D. W.



Devereux Jennings

Griffith, Mickey Neilan and others. A charter member of the American Society of Cinematographers, for the past 17 years Jennings had been associated with the Paramount special effects department.

In addition to his brother, two sisters survive.

(Continued on Page 151)

Now! Record your own sound on 16 mm film!



New RCA Magnetic Recorder-Projector records sound on 16mm film, projects movies and reproduces either magnetic or optical sound track. Can also operate as tape recorder or public-address system.

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It's really two machines in one: a complete magnetic recorder plus a 16mm film projector. It projects film with clean sharp professional quality and it reproduces sound (from either optical or magnetic track) with clear-cut, lifelike realism. It's the kind of *quality* you'd expect from RCA—builder of big theatrical-type 35mm movie projectors—world famous for sound and film recording.

Best of all . . . it pays for itself!

You'll save enough on your first few film-recording jobs to pay for this new RCA machine. You can put new sound on a 10-minute movie for a cost of only a few dollars . . . actually about 11% of the cost of optical sound! *Salvage all your old movies*—make them useful again. Here indeed is the greatest tool ever developed for folks who use 16mm films. All built and backed by RCA—fore-

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Second—you project this film in the new RCA Magnetic Recorder-Projector.

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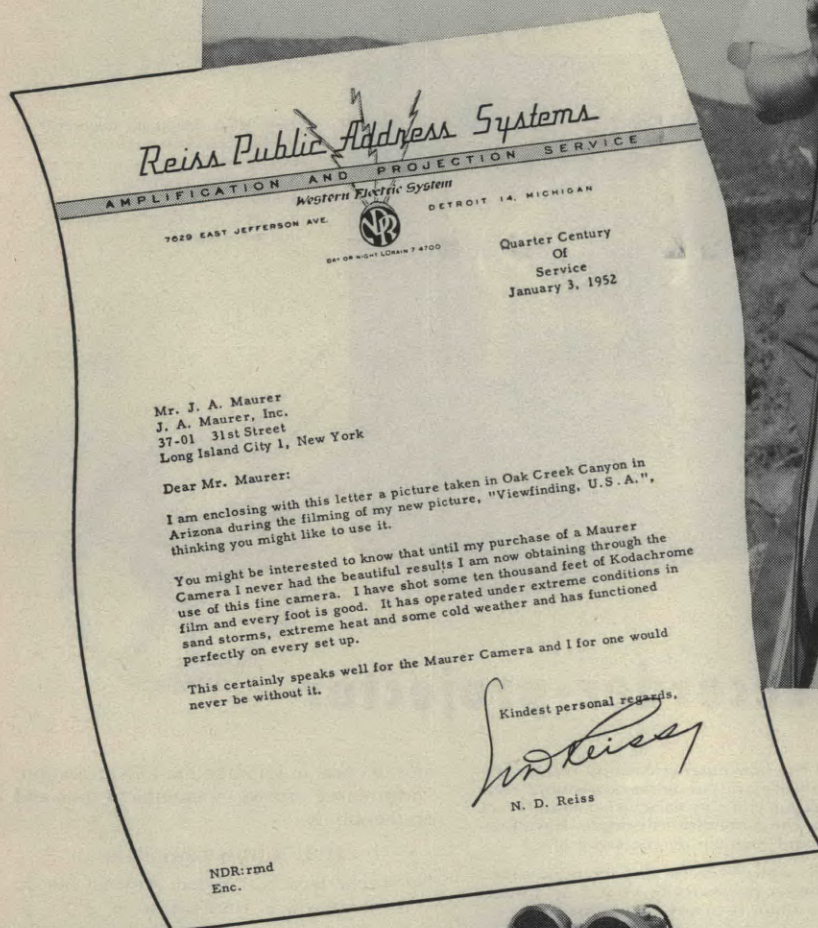
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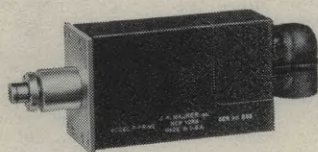


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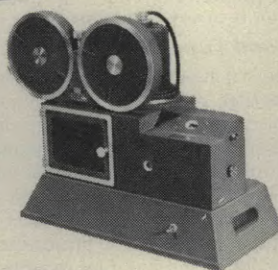
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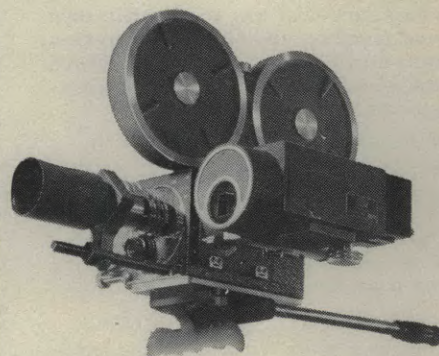
N. D. REISS, (author of the letter at left) of Reiss Public Address Systems, Detroit, shown in action with his Maurer 16mm.



THE MODEL F PRIME RECORDING OPTICAL SYSTEM AND GALVANOMETER A complete light modulating unit for recording sound photographically upon standard film, requires no special servicing or spare parts (other than recording lamp).



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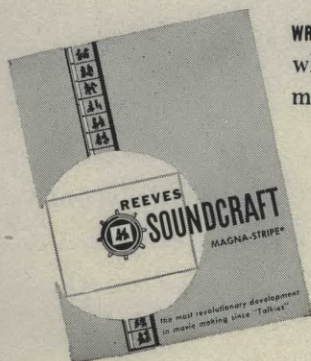
NOW, vast libraries of silent movies can be converted to sound films at small cost.

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BULLETIN BOARD

(Continued from Page 146)

Peter Mole, A.S.C., president of the Society of Motion Picture and Television Engineers, has announced that the SMPTE's 71st Semiannual Convention will take place in Chicago from Monday, April 21 to Friday the 25th, at the Drake Hotel.

Scheduled are eleven sessions during which time sixty papers are scheduled to be delivered. The talks will cover a wide range of important subjects including color television, theatre TV, industrial TV, three-dimension effects, high-speed photography, new type screens, the future of films in education, film exhibition, sound recording and many other vital subjects.

American Society of Cinematographers last month admitted two new members to its organization. They are John Painter, of New York City, and Fred Gately, Hollywood cameraman.

Karl Struss, A.S.C., last month was cited with a special award by the Academy of Stereoscopic Arts and Sciences at the organization's annual awards program in Hollywood. Dorothy Hart made the presentation for the Beverly Hills Stereo club, which sponsored the program.

Tom Tutwiler, A.S.C., returned to Hollywood last month from Bangkok, Siam, where he directed the photography on a feature production for the Sathaporn Cinema Co., Ltd., native film producing company.

Frank Planer, A.S.C., was erroneously credited in our March issue with winning a "Photoplay Award" for the photography of "Decision Before Dawn," a 20th-Fox production. It was a "Look Award" that was presented him for his fine photographic job—giving him two cinematographic awards for the year. The other was the Golden Globe Award for photography of "Death Of A Salesman," produced by Stanley Kramer for Columbia.

Interest created by the article "Reflected Light For Color Photography" in the November, 1951, issue of *American Cinematographer* is evidenced by unusual amount of correspondence received to date by John Arnold, A.S.C., MGM's executive director of photography, whose unique new set lighting lamps were described in the article. Inquiries about adapting lamps to TV studio lighting, portraiture, and small industrial motion picture studios have come from all over the world.

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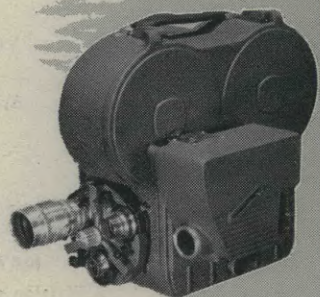
"Land of the Trembling Earth"



AURICON-PRO 16mm CAMERA

used by Ted and Vincent Saizis in Okefenokee 'gator country

Processed in 35mm Technicolor, and now being released by Warner Bros., is the dramatic picture-story, "Land of the Trembling Earth," the only authentic 16mm color picture ever filmed in the dark interior of Southeast Georgia's Okefenokee Swamp! This is a saga of raw courage... picturing the daring of two cameramen, Ted and Vincent Saizis (Chicago Local #666 I.A.T.S.E.), and The Naturalist and Wild Life Director of Okefenokee Swamp Park, David DaLie, as they penetrated this unexplored section of the United States, using an Auricon-Pro 16mm Camera. They recorded such amazing sights as huge attacking alligators... a maddened mother bear... swamp snakes in natural habitat... as well as the experiences of men continually facing death... set against the awesome brutality of one of the world's wildest areas! Watch for this unusual short subject at your neighborhood theatre. It will soon be shown to millions of movie-goers, thanks to the courage of three adventurers and the dependable operation of the Auricon-Pro Camera.



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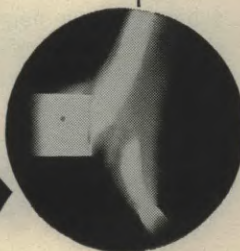
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A FEW YEARS AGO, when cameramen were kicking around the idea of shooting feature films in 16mm and then blowing them up to 35mm for theatrical release, they little realized the idea was only a short few years from reality. Today, while few 35mm features have been shot in 16mm, the production of 35mm short subjects from 16mm color film has proved highly successful.

With the introduction of 16mm Commercial Kodachrome, film laboratories have been able more successfully to make acceptable 35mm blowups in color. Today, quite a number of the short subjects seen on theatre screens originate in 16mm photography. Beginning with the spectacular footage shot with 16mm cameras during the last war, which was brought to theatre screens in 35mm Technicolor, some producers have steadily improved their methods until today studios like Warner Brothers, Walt Disney and Republic now have regular programs of short subject releases which are photographed in 16mm Kodachrome. And to underscore both the merits and the quality of the narrower film, some of these shorts have won Academy Awards—Warner Brother's "Facing Your Danger" and Walt Disney's "Seal Island" and "Beaver Valley," to name just a few. Disney's "Nature's Half Acre," also shot in 16mm, won an Academy Award this year.

One of the newer and no less noteworthy series of shorts, which has its beginning in 16mm Kodachrome, is "This World Of Ours," released in 35mm Trucolor (a full 3-color film) by Republic Studios. Produced for Republic by Dudley Pictures Corporation, the footage for most of these documentary-travelogue subjects is photographed in 16mm Commercial Kodachrome by Edwin E. Olsen, Dudley's ace cinematographer. The first six in the series released or about to be released are: "Italy," "Switzerland," "Egypt," "Greece," "Puerto Rico" and "Chile."



EXCEPTIONAL 16mm color photography is exemplified in the short subject, "Switzerland," produced for Republic Pictures by Dudley Pictures Corp. and recently released in 35mm Trucolor. Photography was by 16mm cinematographer Edwin Olsen (in white cap, above).

Filming Travelogues In 16mm Color

Ed Olsen's daring 16mm color film "Facing Your Danger" won an Academy Award for Warner Brothers and helped pave the way for wider use of 16mm film in the production of travel - documentaries for theatrical release.

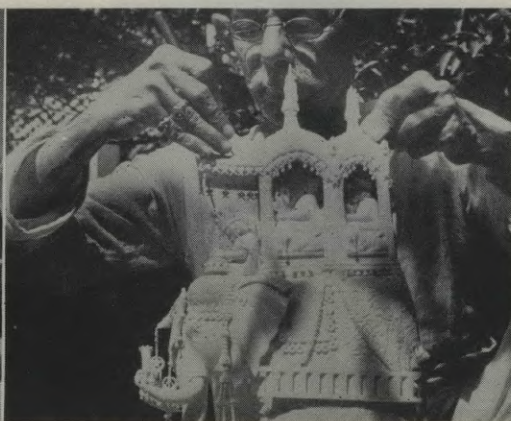
"In shooting material for travelogue-type short subjects," said Olsen, "the 16mm camera and film has been found superior in many ways to 35mm. Camera and associated equipment is lighter, more easily transported in rugged regions; film supply requires less space,

is easier to store and handle; and the use of smaller camera doesn't attract the attention that larger cameras do. Thus it is possible to film more interesting material and to get shots more unobtrusively in foreign lands where profes-

(Continued on Page 172)



SHOWN here astride camel at Pyramids, Olsen recently completed 'round-the-world shooting assignment for Carl Dudley.



OLSEN'S discerning camera caught fine detail of native handcrafts in India; the growth of Israel; and resurgence of civil life in Manila.



FOR documentary on Philippines, Olsen recorded scene of MacArthur's departure from Corrigedore, where battle rubble is still to be seen.

The Filming Of 'Viva Zapata!'

Joseph MacDonald's realistic cinematography combined with the inspired direction of Elia Kazan has produced one of the most notable productions of 1952—a sure Oscar nominee next year.

By HERB A. LIGHTMAN

IN PREPARING to photograph John Steinbeck's production of "Viva Zapata!" for 20th Century-Fox, Director of Photography Joe MacDonald, A.S.C., was faced with an assignment that presented many challenging technical problems—but which at the same time offered unusual opportunities for forcefully beautiful camera treatment. Final release prints of this outstanding historical film prove that not only did MacDonald brilliantly overcome the production's inherent photographic problems, but that he also took full advantage of dramatic locales, characters and backgrounds to create photographically a feature of rare pictorial beauty.

"Viva Zapata!" is a story of Mexico, and of one Mexican in particular—Emiliano Zapata, a brooding illiterate young Indian who, as ally of Pancho Villa, became commanding general of the Liberator Army of the South in the struggle to end the tyrannical 34-year rein of dictator-president Porfirio Diaz. It is a narrative of hate and despair, violence and love—a fiery page out of Mexico's flaming history, told with the kinetic sweep and excitement that only the motion picture camera can capture.

To produce this film with all the verve and scope demanded by the script's vast tapestry of action, it was necessary to find exactly the right locales and backgrounds. It had been hoped that the picture might be filmed in Mexico, actually in the areas where the historical incidents took place. When official regulations of the Mexican government precluded this possibility, scenarist John Steinbeck, director Elia "Gadge" Kakan, and cinematographer Joe MacDonald set off to scout the American side of the Rio Grande for facsimiles of Ayala, scene of the first Zapata uprising in February, 1911; of Chinemaca, where Zapata was assassinated; of Cuernavaca, Tlaquilteango and Quila Mula. They found these in a canyon near the junction of the Pecos and Rio Grande Rivers, at Roma, San Ygnacio, and Dolores, Texas, where art directors remodeled large sections of the towns, and at Durango. Other set-

tings at the 20th-Fox Studio and ranch, copied from old photographs comprise a composite Morelos with all the picturesque of old Mexico.

Scenery and props that Hollywood couldn't duplicate for \$10,000,000 were filmed in former Mexican villages along the Rio Grande. The hundred-year-old town of Roma, Texas, its adobe store buildings, church and wrought-iron embroidered homes mellowed by time, was made available to the company. This quaint village with its huge cobblestone plaza declared a three-week holiday while 500 of its picturesque citizens donned makeup and peon costumes to work before the cameras as extras.

From the rocky delta of the Pecos and Rio Grande east of Del Rio, Texas, the company staged a 350-mile safari to McAllen, Laredo, Dolores, Roma and San Ygnacio, Texas, duplicating scenery of the state of Morelos, Mexico. Here MacDonald encountered sunlight in excess of 1600 foot candles; so bright, in fact, that it could not be measured with a conventional exposure meter. The

Southern Texas sunlight proved to be an average of 400 foot candles brighter than California's.

Temperatures in the shade ranged as high as 130°, not counting the added heat given off by the lights. This inferno took its toll among the grips, electricians and laborers, while the actors themselves often required restoratives to sustain their energies in the enervating heat. While this situation may have served a useful purpose in producing honest sweat on the actors, thus enhancing their resemblance to Mexicans in native surroundings, it gave the make-up men trouble because it melted mascara and the glue on false wigs and moustaches.

When asked about specific problems in shooting the picture, Joe MacDonald laughingly replied: "I guess you could say that one of my main problems was the nude swimmers across the river on the Mexican side who insisted on swimming into the scene every time the camera started on our side. We finally had to ask the authorities to keep them corraled. The sound man had his troubles, too, trying to get rid of the music blaring forth from juke-joints across the river."

From the standpoint of materials used, "Zapata" posed a real problem in logistics. By truck, trailer and freight car, 100 tons of heavy equipment were shipped from Hollywood to Texas, to Durango, Colo., to the studio's 35-mile distant ranch and back to Hollywood again. Sets ranged from squalid mud huts to the ornate national palace in Mexico City recreated by art directors on the studio's back lot. A wealthy landowner's stable shown in the film cost \$50,000 alone and featured marble columns, gold chains across the stalls, fresh running water, and sculptured bas relief plaques behind each blue-ribbon horse. The object of this equine Waldorf Astoria was to point up the contrast in living conditions between the rich and poor during Mexico's troubled days between 1911 and 1920.

The total result of the huge expenditure of time, money and effort required



IN "VIVA ZAPATA," cinematographer Joe MacDonald combines lighting, filters and dynamic camera angles to bring into sharp relief the stark, rugged Mexican locales of the story.



REALISTIC Mexican locales, such as this, were reproduced by Fox on this side of the border, in Texas. Here Marlon Brando (right),

as the illiterate Zapata, listens to reading of a newspaper account of the revolutionary aims of Madero, who seeks him as aide.

to film the location scenes is a style of dramatic and photographic realism that could never have been achieved had the entire picture been shot in the studio. The film has an authentic "scene-of-the-crime" atmosphere which is reminiscent of "Forgotten Village," the powerful feature documentary filmed by John Steinbeck and Herbert Kline in a primitive Mexican village several years ago.

"Zapata" carries its realism to the technical phases of filming. There are no process background shots in the picture. All the backgrounds are the real thing—which means that important problems of light balance and depth-of-field presented themselves. All interiors (with the exception of the presidential palace) were shot in actual buildings and homes on location. Quite often action was played from a foreground interior to exterior areas clearly seen through an open window or door in the scene. This means that tremendous amounts of light had to be poured on the interior—not only to build up its brightness in ratio to that

of the exterior, but also to permit the lens to be stopped down far enough to hold sharp focus both in the foreground interior plane and the widely separated background exterior plane.

An outstanding example of this technique is the proposal sequence which takes place inside the parlor of a mansion. Broad barred windows dominate the background, opening directly into the street. In the foreground, the protagonist presses suit for the hand of the woman he loves. Through the window (and all the way across the street) the action of the sub-plot can be seen developing. Both planes are in sharp focus.

MacDonald's striking compositions achieved through the use of these depth-of-field shots throughout the film were made possible by latensification of the negative, which added $1\frac{1}{2}$ stops to the speed of the film and permitted him to stop down the lens (sometimes to f.22) to insure sharpness in the widely separated planes of action.

Photography of exteriors combines

lighting, filters, and dynamic camera angles to bring into sharp relief the starkly rugged landscape. The effect is further enhanced by fully exploiting natural light and weather conditions to add to the dramatic mood of the action. Overcast skies boiling with ominous clouds serve as a backdrop for violent situations. There was never any production hold-up for weather. To the contrary, even the most inclement atmospheric conditions were put to work to build up mood.

Often, a particularly dramatic sky would develop quite suddenly—a fleeting condition that could be counted on to last for only a few minutes. At these times the company had to work at top speed to get all the long shots "in the can" before the weather conditions changed. On one occasion the company rose at 3:00 a.m. in order to film a sequence of action dramatically silhouetted against the eery dawn sky.

The interior sequences of "Viva Zap-

(Continued on Page 183)



CINEMATOGRAPHY AWARD winners Alfred L. Gilks, A.S.C., and William Mellor, A.S.C., with MGM screen starlet Vera Ellen who presented the awards at the Academy's annual presentation ceremonies in Hollywood last month.

color production. For directing the Technicolor photography Alfred L. Gilks, A.S.C., was presented with an Oscar commemorating the achievement. John Alton, A.S.C., was cited for the ballet photography.

Cinematography achievement awards were made in two classifications—color productions and black-and-white productions. To William Mellor, A.S.C., went the Oscar award for photography of Paramount Pictures' "A Place In The Sun," cited for the best photography of a black-and-white production.

It is the first time that any of these men have made the winner's circle in the annual Oscar derby.

Still another A.S.C. member was presented with two Academy awards. Head of Paramount Pictures' special photographic effects department, H. Gordon Jennings, and his staff were cited for best achievement in special effects for "When Worlds Collide," produced in Technicolor by George Pal; and together with S. L. Stancliffe, Jennings also received a Class II Technical Award for the development of a servo-operated recording and repeating device for special effects photography.

Also in the realm of cinematography was the Class III Technicolor Award given jointly to Richard M. Haff, Frank P. Herrnfeld, Garland C. Misener, A.S.C., and Ansco for developing the Ansco Scene Tester.

The Academy's choice of "An American in Paris" for both the Best Picture and Best Color Photography awards upset the predictions of most pre-awards pollsters. The colorful, tuneful M-G-M production nosed out two of the hottest contenders to point up conclusively the fact that independent voting, not politics, selects the winners in the annual Academy event. M-G-M had three contenders in the race for color photog-

1951 'Oscar' Winners

Academy cites "An American In Paris" and "A Place In The Sun" for best cinematography of the year.

OSCAR—HOLLYWOOD'S GOD of achievement—paid his 24th annual visit to the film capital the evening of March 20th and honored some forty-three artists and technicians for cinematic accomplishments during 1951. Occasion was the twenty-fourth annual awards presentation ceremonies of the Academy of Motion Picture Arts and

Sciences at the RKO-Pantages theatre in Hollywood.

Voted Best Picture of 1951 by the Academy was Metro-Goldwyn-Mayer's Technicolor musical, "An American In Paris," produced by Arthur Freed. In addition, the picture garnered eight additional awards, including that for best achievement in cinematography for a



OSCAR, coveted award of the Academy of Motion Picture Arts and Sciences in Hollywood. More than forty awards were distributed this year—five to A.S.C. members.



GORDON JENNINGS, A.S.C., director of Paramount studio's special photographic effects department, was honored with an award for best special effects and for technical achievement.

raphy honors. Besides "American In Paris," the studio's "Quo Vadis" and "Showboat" also had been nominated.

Those who have seen "An American In Paris" will readily agree that the production is remarkable for its incomparable pictorial presentation. Few pictures have displayed so conclusively how extensive pre-planning of the photography can assure a picture's success. In less capable hands, "An American In Paris" could have been just another musical, instead of the labor of love that it is.

(Continued on Page 175)

ALFRED L. GILKS, won still other honors for his photography of "An American In Paris." *The Film Daily*, New York trade paper, put Gilks at the head of its list of the Year's Outstanding Directors of Photography classification in its annual "Filmdom's Famous Fives of 1951" poll conducted among the nation's representative critics and reviewers of leading newspapers, magazines, wire services, syndicates and radio film commentators.

The five cinematographers voted tops this year in the poll are as follows: Alfred Gilks, for MGM's "American In Paris"; Robert Surtees, A.S.C. and William Skall, A.S.C., for MGM's "Quo Vadis"; William C. Mellor, A.S.C., for Paramount's "A Place In The Sun"; Claude Renoir, for Kenneth McEldowney's "The River," and Chris Challis, B.S.C., for Lopert-London Films' "Tales Of Hoffman."

Said *The Film Daily*: "Premier photographic honors for 1951 were voted by the critics and commentators to Alfred Gilks, for his magnificent camerawork on "An American In Paris." Gilks finished with a comfortable 15-vote lead over Robert Surtees and William Skall, jointly responsible for the pictorial quality of "Quo Vadis" as its directors of photography. Number 3 spot went to William Mellor for photography of "A Place In The Sun."

ROSTER OF CINEMATOGRAPHY OSCAR WINNERS 1928 to 1951

Year	Class.	Cameraman	Picture Title	Studio
1951	B & W	William Mellor, A.S.C.	"A Place In The Sun"	Para.
	Color	Alfred Gilks, A.S.C. John Alton, A.S.C. (Ballet Photography)	"American In Paris"	MGM
1950	B & W	Robert Krasker	"The Third Man"	British
	Color	Robert Surtees, A.S.C.	"King Solomon's Mines"	MGM
1949	B & W	Paul Vogel, A.S.C.	"Battleground"	MGM
	Color	Winton Hoch, A.S.C.	"She Wore Yellow Ribbon"	R.K.O.
1948	B & W	William Daniels, A.S.C.	"The Naked City"	U-I
	Color	Joseph Valentine, A.S.C. William V. Skall, A.S.C. Winton Hoch, A.S.C.	"Joan Of Arc"	R.K.O.
1947	B & W	Guy Green	"Great Expectations"	Rank-U-I
	Color	Jack Cardiff, A.S.C.	"Black Narcissus"	Rank-U-I
1946	B & W	Arthur Miller, A.S.C.	"Anna And King Of Siam"	Fox
	Color	Charles Rosher, A.S.C. Leonard Smith, A.S.C. Arthur Arling, A.S.C.	"The Yearling"	MGM
1945	B & W	Harry Stradling, A.S.C.	"Picture Of Dorian Gray"	MGM
	Color	Leon Shamroy, A.S.C.	"Leave Her To Heaven"	Fox
1944	B & W	Joseph IaShelle, A.S.C.	"Laura"	Fox
	Color	Leon Shamroy, A.S.C.	"Wilson"	Fox
1943	B & W	Arthur Miller, A.S.C.	"Song Of Bernadette"	Fox
	Color	Hal Mohr, A.S.C. W. Howard Greene	"Phantom Of The Opera"	Univ.
1942	B & W	Joseph Ruttenberg, A.S.C.	"Mrs. Miniver"	MGM
	Color	Leon Shamroy, A.S.C.	"The Black Swan"	Fox
1941	B & W	Arthur Miller, A.S.C.	"How Green My Valley"	Fox
	Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C.	"Blood And Sand"	Fox
1940	B & W	George Barnes, A.S.C.	"Rebecca"	Selznick
	Color	George Perrinal	"Thief Of Bagdad"	Korda
1939	B & W	Gregg Toland, A.S.C.	"Wuthering Heights"	Goldwyn
	Color	Ernest Haller, A.S.C. Ray Rennahan, A.S.C.	"Gone With The Wind"	Selznick-MGM
1938		Joseph Ruttenberg, A.S.C.	"The Great Waltz"	MGM
1937		Karl Freund, A.S.C.	"The Good Earth"	MGM
1936		Tony Gaudio, A.S.C.	"Anthony Adverse"	WB
1935		Hal Mohr, A.S.C.	"Midsummer Night's Dream"	WB
1934		Victor Milner, A.S.C.	"Cleopatra"	Para.
1933		Charles B. Lang Jr., A.S.C.	"A Farewell To Arms"	Para.
1932		Lee Garmes, A.S.C.	"Shanghai Express"	Para.
1931		Floyd Crosby, A.S.C.	"Tabu"	Para.
1930		William Van Der Veer, Joseph T. Rucker	"With Byrd At So. Pole"	Para.
1929		Clyde DeVinna, A.S.C.	"White Shadows In So. Seas"	MGM
1928		Charles Rosher, A.S.C. Karl Struss, A.S.C.	"Sunrise"	Fox

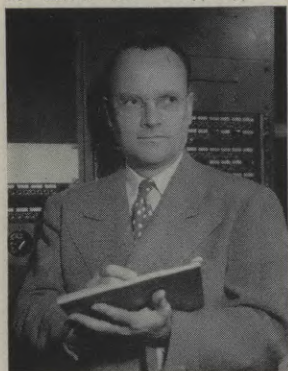
A New Method Of Handling Sound For Foreign Releases

Magnetic sound in one language can be erased and replaced by another language on the same print, thus extending the utilization of release prints.

By LOREN L. RYDER, A.S.C.

Director of Recording and Engineering, Paramount Studio

A MAJOR FACTOR in the production of release prints for foreign release has been the additional cost involved in making new sound tracks for such films to meet the language requirements of



LOREN L. RYDER: "... makes possible reaching markets now untouched."

the various countries. It is proposed here that in view of the techniques of magnetic recording and editing now in use in Hollywood which are saving time, simplifying

sound handling, and improving sound quality—all with considerable savings in costs—that this system can also simplify the handling of foreign versions, effect a better use of release prints, and gain new markets with comparable savings in costs and time.

Simplification of handling foreign versions would be the direct result of employing magnetic recording and reproduction. Magnetic sound in one language can be erased and replaced by another language *on the same print*, thus extending the utilization of release prints. The system herein proposed eliminates the need for elaborate compositing and dubbing, thus reducing the cost of foreign versions and, in turn, making it possible to economically reach markets which are now untouched. All this applies to 16mm as well as 35mm foreign release prints. It also is applicable to educational and industrial films, few of which ever receive substantial foreign exhibition because of the cost factor involved in making the special sound tracks.

We shall describe here a proposed system of applying some of the established magnetic recording procedures to the foreign handling of American-made motion pictures. It should be noted that as

each phase of the system is placed in service, savings can be effected and existing practices can be retired. Further, the proposal has great latitude to meet special requirements.

In the initial step of the proposed procedure the Hollywood studio would make a dual-track recording with English dialogue on one track and all music and sound effects on a separate track. This is done during the final composite rerecording on each picture. Several studios now are using three-track magnetic recorders in the dubbing channels and are already making separate sound track records of dialogue, effects and music. Some studios transfer effects from the original dialogue track to the effects track if the effect is not under

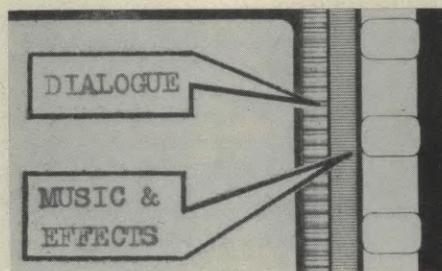


FIG. 1—Music and effects are recorded on the one track located just inside the sprocket holes, and the dialogue is recorded separately on the second track next to the picture.

dialogue. These three-track recorders are used in existing procedures to gain effects plus music less English dialogue for foreign versions, and to gain English dialogue plus effects less music for television use where music clearance is unobtainable. The domestic photographic sound negative is obtained by electrically combining the three tracks and rerecording to a photographic negative.

The laboratory, in collaboration with the sound department subsequently would prepare a fine-grain composite master print for foreign use. Here the sound track actually is a dual track—two separate photographic sound tracks 50 mils in width. The music and effects are recorded on the one track located just inside the sprocket holes, and the

dialogue is recorded separately on the second track which is next to the picture. (See Fig. 1.) The area separating the two tracks is .005 inches in width. Such dual-track prints will play on any existing theatre equipment interchangeably with present single-track sound prints.

In foreign language countries, such as France, Italy, Germany and Spain, where the market justifies accurate lip-synchronization and a substantial number of release prints of a given feature, it is suggested that dialogue synchronization for such films be done as at present (possibly using magnetic recording) and that foreign dialogue be printed photographically to the release prints in the area normally occupied by the English dialogue (50 mil) track. Such dual-track prints will also play on any existing theatre equipment interchangeably with the present type prints with standard sound tracks.

The synchronized magnetic foreign dialogue track can be rerecorded directly to the foreign language composite negative. It will only be necessary to establish a proper playing level of the dialogue to go with the music and effects.

In making a foreign language release print, the important effects which were recorded back of dialogue during

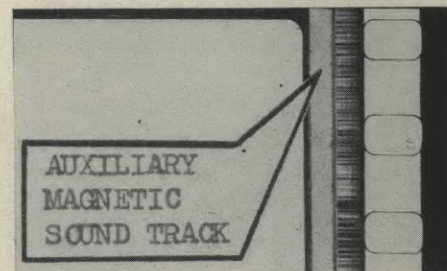


FIG. 2—Prints to be adapted for foreign release would have auxiliary magnetic track applied over old dialogue track on which new foreign dialogue is then recorded.

production shooting and which are missing from the music and effects track, should be synchronized. These effects can be combined with the U.S.-prepared music and effects to obtain a new and

(Continued on Page 169)

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FOR THE CINEMATOPHAGER with imagination and a 16mm camera having single-frame release, table-top photography and stop-motion animation afford a wide range of presentations for sponsor's products or services. Here, Author Shields prepares to film a short TV commercial for a local dairy. Skillful photography is necessary to give the utmost visual impact to TV announcements of short duration.

TV Film Commercials For Local Sponsors

Needs of local advertisers outside the major television centers open up many opportunities for small-scale TV film production.

By DAN SHIELDS

Film Director, WFMY-TV, Greensboro, N.C.

OUTSIDE SUCH nominal centers of television as New York, Chicago, Los Angeles, etc., there exist opportunities and indeed a real need for skilled 16mm cinematographers with imagination and ability who can turn out the spot announcements and film commercials required by the television stations located

in more remote areas. As Film Director of one such station—WFMY-TV in Greensboro, North Carolina—I have been in position to evaluate this need and in turn supply the requirements of this station for such film material.

Of the sixty-three U.S. market areas now served by television, forty-nine¹ are one-station or two-station areas. Here exists a substantial number of actual and potential TV sponsors, most of them able and willing to foot the bill for television advertising, but not big enough to organize and conduct programs on the scale of national sponsors.

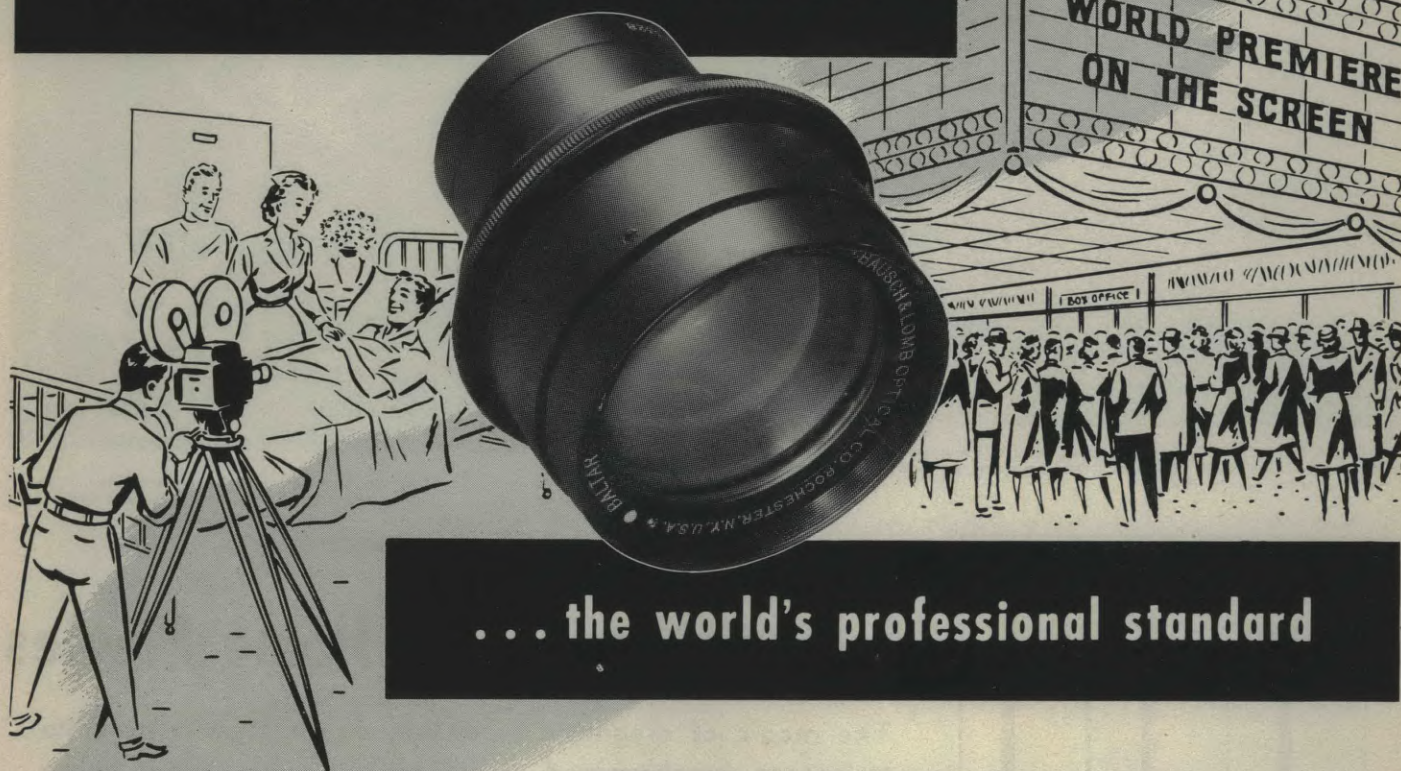
Locally-produced commercials on film can provide successful television advertising for home-town merchants and other sponsors. They can be made for

EXAMPLES of spot announcements made by author for WFMY-TV local sponsors: Top—3 frames from spot for Holsum "Brown 'n Serve rolls." By stop-motion animation, rolls gradually become "oven browned" and text, easily composed of plastic title letters, is superimposed over picture. Below—3 frames from Hospital Saving TV spot with station identification. Reproduction of Blue Cross and Blue Shield trademarks appears for 3 seconds, then first words of text, "Hospital Saving," appear superimposed for one second, followed by remainder of text, "Chapel Hill," flashing on screen for additional six seconds. At same time announcer states "Only Hospital Saving of Chapel Hill has Blue Cross and Blue Shield. WFMY-TV, Greensboro."

¹Television Magazine—status map.

(Continued on Page 180)

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B&L 8mm and 16mm Animar Lenses . . . the series you can recommend to your friends with confidence for professional quality in their home movies. At all Authorized Animar Dealers.

BAUSCH & LOMB

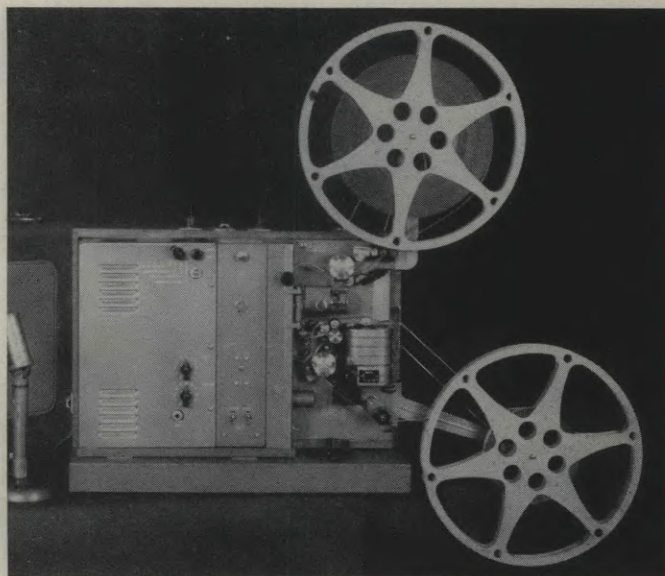
OPTICAL COMPANY



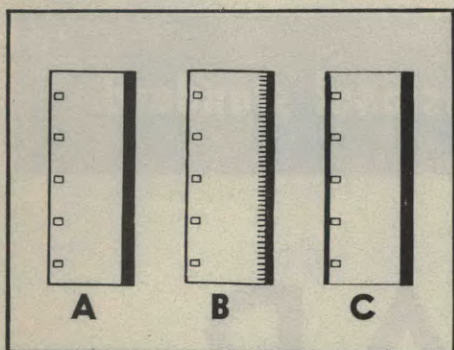
ROCHESTER 2, N. Y.



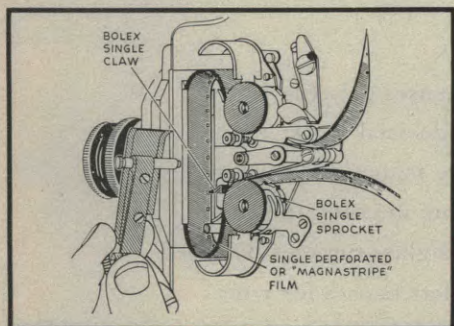
BELL & HOWELL'S Filmosound 202, newest 16mm magnetic recorder-projector, makes it easy for the amateur to add synchronized sound to his movie films.



RCA-VICTOR'S Model 400 16mm magnetic recorder-projector, first in the field, affords simple, low-cost sound for both professional and amateur. Like B&H's 202, it plays sound on film also.



MAGNETIC iron oxide striping is applied to 16mm films as shown above. A—Bell & Howell Soundstripe; B—Bell & Howell half-track Soundstripe; C—Reeves Magna-Stripe with balancing stripe on opposite edge.



Magnetic sound calls for using single-perforated film in camera, and replacing silent camera sprocket with sound sprocket.

Magnetic Sound For Home Movies

The magic of magnetic recording now makes it possible to record synchronized sound for all your 16mm home movie films, old or new, at small cost. Here's how.

By JOHN FORBES

THE BIG NEWS these days for amateur movie makers is the recent introduction of a practical method of recording magnetic sound on 16mm home movie films. It means an end to discs, phonograph records, magnetic wire and tape, of dual turntables and stroboscopes—all of which progressive amateurs have dealt with in recent years in an attempt to provide synchronized sound for their movies. Now two developments make synchronized sound possible for every 16mm filmer: (1) sound striped movie film, and (2) 16mm magnetic recorder-projectors.

Two equipment manufacturers have announced and are making delivery on 16mm magnetic recorder-projectors: RCA Victor, and Bell & Howell Company. Either projector may also be used to screen silent films. RCA's projector was described in the November, 1951,

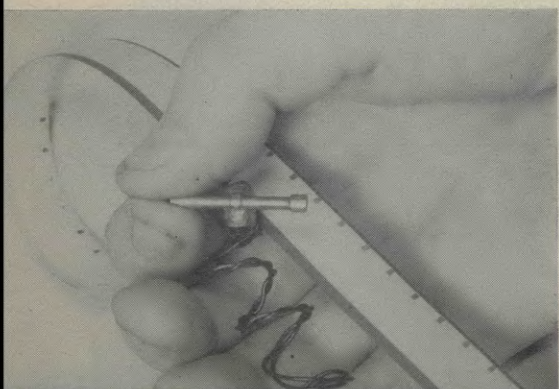
issue of American Cinematographer; Bell & Howell's in last month's issue. Others have been developed and will soon be available.

Now, the thought in every amateur's mind is: *How do I record magnetic sound on my films?*

The method is simple, but it cannot all be explained in a single paragraph. So let's begin at the beginning. The thing to remember is that magnetic sound can be applied to both your old 16mm films and to those which you will make from now on. The method of recording sound for each is identical, but the intermediate steps are different. In recording magnetic sound for an old film, it is necessary to make a duplicate print on single-perforated film stock in order to allow one unperforated edge of the film for the sound track. Here will be applied the coating of Soundstripe or Magna-Stripe—a narrow stripe of iron oxide emulsion on which recording is done magnetically.

(Continued on Page 170)

TINY magnetic head is available for engineers and experimenters wishing to convert 16mm S.O.F. projectors to magnetic sound. Addition to amplifier circuit also is necessary.



TWENTY-FOURTH ANNUAL AWARDS

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Director of Photography

"A PLACE IN THE SUN"

PARAMOUNT PICTURES

COLOR

ALFRED GILKS, A.S.C.

Director of Photography

"AN AMERICAN IN PARIS"

METRO-GOLDWYN-MAYER

Ballet Number

JOHN ALTON, A.S.C.

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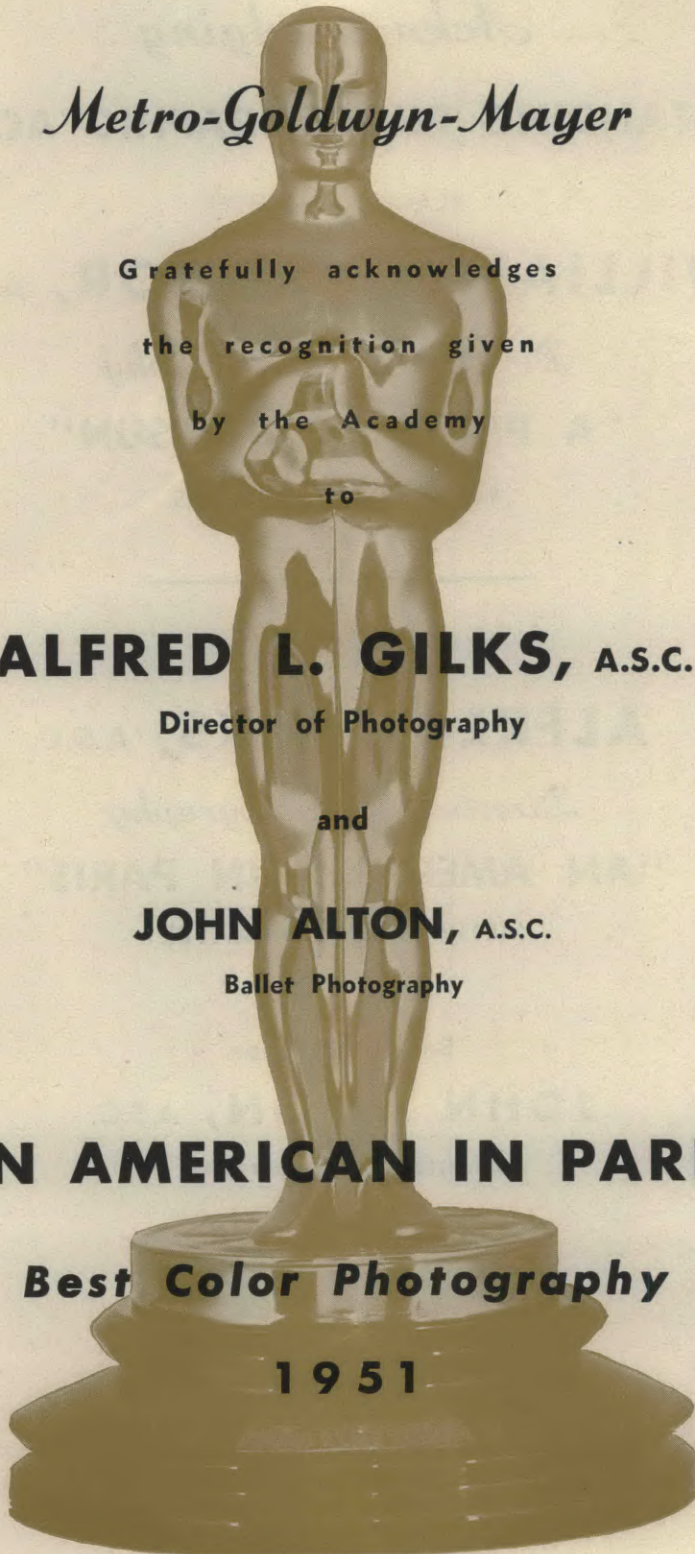
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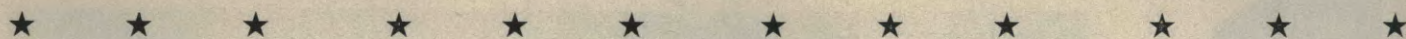
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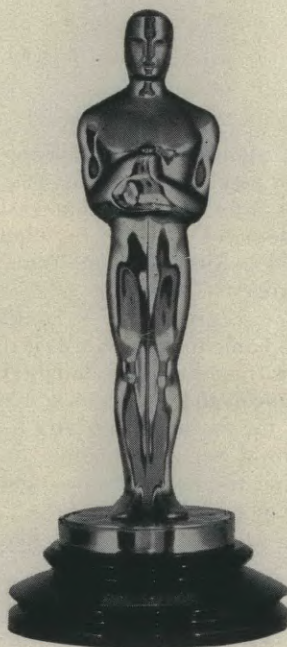
LEON SHAMROY, A.S.C.
"David And Bathsheba"
(Fox)

ROBERT SURTEES, A.S.C.
"Quo Vadis"
(MGM)

WILLIAM V. SKALL, A.S.C.
"Quo Vadis"
(MGM)

CHARLES ROSHER, A.S.C.
"Showboat"
(MGM)

JOHN F. SEITZ, A.S.C.
"When Worlds Collide"
(Paramount)



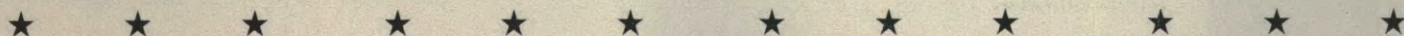
W. HOWARD GREENE, A.S.C.
"When Worlds Collide"
(Paramount)

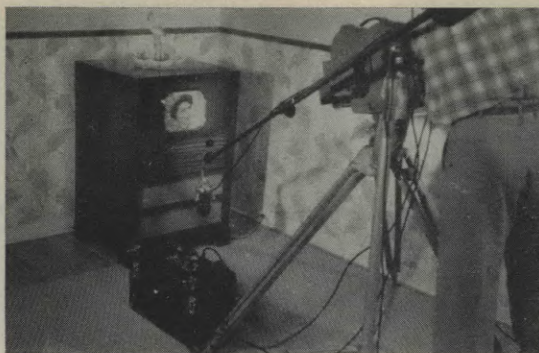
FRANK PLANER, A.S.C.
"Death Of A Salesman"
(Kramer-Columbia)

NORBERT BRODINE, A.S.C.
"The Frogmen"
(Fox)

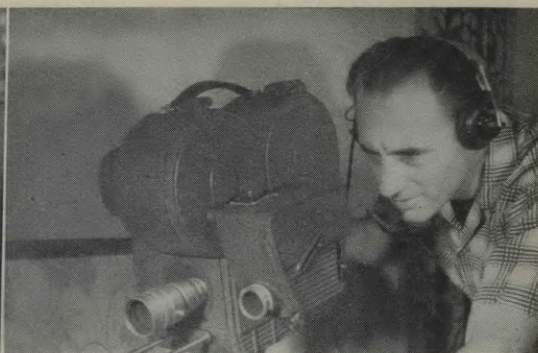
ROBERT BURKS, A.S.C.
"Strangers On A Train"
(Warner Brothers)

HARRY STRADLING, A.S.C.
"A Streetcar Named Desire"
(Warner Brothers)





POSITION of camera and microphone before the television receiver.



CAMERA is tilted down slightly to avoid picking up glare from surface of picture tube.



MICROPHONE, supported from boom, was suspended before the speaker grille of the receiver.



BEFORE filming started, the sound level was adjusted to the correct range at the amplifier controls.

Home Movies From Television

**Focus your camera on your home TV screen
for a new source of movie making pleasure.**

By LEO CALOIA

AS YOU WATCH the abundance of entertainment that comes to you via your home television receiver, has it ever occurred that you might like to record some of it with your cine camera and thus build a library of entertainment films for the future?

The thought never occurred to me until recently when a friend came to me and asked if such photography was possible. His daughter was to appear as a dancer and singer on a TV program that evening for the first time, and he wanted a movie record of her performance. So I decided to try filming the program in sound with my Auricon 16mm sound camera.

I remembered that television engineers had

said that movies shown on television are projected at the rate of 30 frames per second; that to rephotograph such pictures or in fact any TV program from the receiver tube at sound speed of 24 f.p.s. would result in some under-exposure, black bars across the picture area, and some flicker—all due to the 6 frame-per-second difference between the TV projector speed and speed of the camera recording the picture from the tube.

Being more than a little curious, I set up my equipment and tried it anyway. We were more than satisfied with the results. Three clips from the film are reproduced on this page and, as may be seen, the overall pictorial result is far superior to some kinescope recordings. True, there is a slight light streak across the middle of every other frame, but this does not seriously impair the screen result.

The photos at top of page show manner of

THREE CLIPS are reproduced here from author's TV film recording photographed at 24 f.p.s. These show unusual clarity of image and only a slight light-bar across every other frame. Sound track reproduced entirely satisfactory.



setting up the camera and microphone before the television receiver. The camera position was purposely made higher than level of the picture tube to permit tilting the camera down slightly to avoid glare from the tube.

The microphone was suspended by boom in front of the television speaker grille. The sound amplifier unit was then set to bring in the sound at the proper level, and photography of the program begun.

I used Ansco Triple-S panchromatic film at an exposure of F/1.6—an exposure determined by meter reading. On the camera I used an Eastman Kodak 2-inch F/1.6 lens. Distance from camera to TV set, having a 10-inch tube, was five feet. Further experiments since conducted reveal that the sharpest pictures on film result when photographing a small TV tube, such as the 10-inch referred to above.

This same photographing procedure may be followed with equal success with a silent cine camera, providing photography is done at 24 f.p.s.

This new movie making idea opens up a broad new field for the amateur movie maker, and will prove especially attractive to the lethargic cine fan who rarely takes his camera afield these days. For him, he can do all his movie making indoors; moreover, such movies require no titles, no splicing. This is already done for him!

One movie amateur questioned the legality of making movies of TV programs. There is no restriction of any kind as long as such movies are not used for commercial purposes.

HANDLING SOUND FOR FOREIGN RELEASES

(Continued from Page 158)

complete music-and-effects track for the foreign language release. This last step can be done during the electrical transfer from the fine grain composite master print to the foreign composite dupe release negative. Synchronizing and transferring can be handled at a foreign studio to conserve dollars.

It is important that we point out here that this procedure minimizes the electrical transferring and eliminates the complex setting-up and complete re-recording methods which are still in use at most studios.

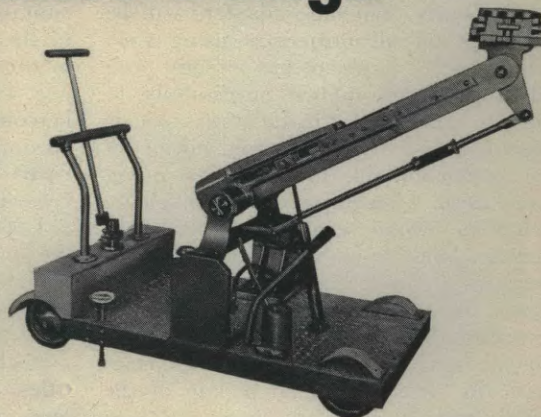
Upon completion of the release run, prints to be adapted for showing in other foreign language areas would then be given an auxiliary magnetic sound track (Fig. 2) on which the foreign language dialogue would be recorded. The track, a stripe of magnetic iron oxide 50 mils in width, would be applied over the 50 mil dialogue (optical)

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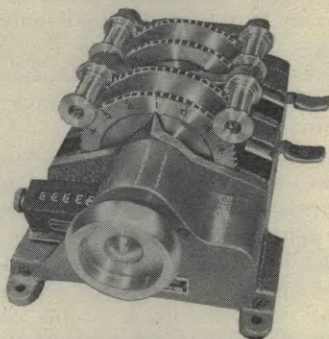


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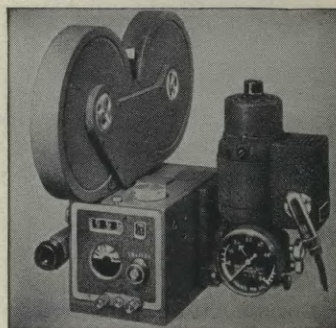
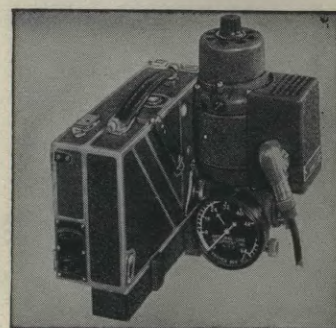
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track area of these prints. Thus, whenever desired, the dialogue recorded on this track in one language can be easily erased and a complete new dialogue track in another language and dialect applied. Dual sound tracks having English dialogue also can be similarly striped and used.

Obviously, magnetic adapters will be required on all projectors using such films. Such equipment has already been developed and applied successfully to theatre projectors. Installation cost is nominal, and therefore would not prove an insurmountable problem even in remote areas. Installation of such magnetic adapters would enable exhibitors in foreign lands to show a wider range of features at lower cost to them. In most cases, only the dialogue track would be rerecorded. In projecting such prints, the dialogue would be picked up magnetically with an optical pickup of the music and effects.

Synchronization can be as precise and as complete as desired; or, for limited markets, the dialogue track can be replaced with a recording of description or narration. In its simplest form, a striped print can be taken into a foreign theatre where the dialogue can be magnetically rerecorded in the native language and subsequently be reproduced on the same system. This is already being done with 16mm films.

The procedure we have unfolded here may, at first glance, seem complex and too ambitious. It is actually simpler than the methods now in use. The proposed system may be started and expanded during the retirement of the present system without loss of market.

Some of the major advantages of this system are:

a. The music and effects are accumulated along with domestic rerecording, thus eliminating duplication of effect.

b. No extra or new films will be required for export.

c. The Foreign Department will receive a complete sound track on all music and sound effects.

d. The foreign prints can be used for many languages. It will, therefore, be possible to use prints for many more runnings. This is very important in view of the present trend toward more color pictures.

e. This suggestion eliminates the cumbersome and costly procedure of synchronizing effects and music and the costly procedure of compositing by rerecording for each language.

f. This procedure eliminates many of the present technical sound costs, especially for small countries. This should make it possible to open up new markets.

g. This procedure will make releases available in sound in countries where titles are now used, thus reaching a large illiterate market that is now untouched.

This procedure will require:

a. Some changes in studio equipment in order to supply the dual sound track print.

b. Conversion to magnetic at some of the foreign depots and exchanges where the films are to be handled.

c. Conversion of theatre equipment in the outlying territories and in small countries for dual playing of magnetic and optical film.

The conversion of theatres for combined optical and magnetic reproduction is the main drawback to this proposal. In the light of present knowledge it is quite obvious, however, that for economic reasons conversion will be made sooner or later. In this recommendation we propose making the conversion now and starting the saving now. The conversion should be of a "quickie" type at the lowest possible cost.

owners of their cameras—Bell & Howell Company, and Paillard Products, Inc., manufacturers of the Bolex. The Paillard representative in New York offers to install sound sprockets on the Bolex H-16 for only \$13.50. New Bolex H-16 and Bell & Howell Filmo 70-DL cameras may be had with sound sprockets, if specified at time of purchase.

And now a word about soundtracked films: We already have mentioned two tradenames—Soundstripe and Magna-Stripe. The first is the product—or service—offered by the Bell & Howell Company. After it is processed, you send your single-perforated, 16mm film to your Bell & Howell dealer or to Bell & Howell Company laboratories in Chicago. Here a magnetic Soundstripe is permanently applied to the non-perforated edge of your film, the full width of a standard optical sound track. The company also makes available Soundstripe of half standard width—called half-track Soundstripe. This is applied over one-half the optical track area of 16mm films already having optical sound tracks, making it possible to provide a dual track for such films. This service is employed mainly by industrial and educational film users where it is desired to provide two separate and different sound recordings, thus making it possible to slant the film message to audiences of two different types or levels.

Magna-Stripe is the product and service offered by Reeves Soundcraft Corp., New York City, and its affiliates. As with Bell & Howell's Soundstripe, Magna-Stripe is also applied on single-perforated 16mm film where the optical sound track is usually located. In addition, a narrow "balancing" stripe of the same material is applied on the opposite edge of the film. This equalizes the film's thickness and permits the film to wind evenly on reels. It also makes it easier to handle Magna-Striped film when rolled on hubs or wound loosely when editing.

Single perforated film, which may be striped for magnetic sound, is available on special request from Eastman Kodak, Ansco, DuPont, and Kin-O-Lux. As soon as there is enough demand, camera stores will have single-perforated stock in 100-foot rolls on hand at all times. There is also some talk that film manufacturers soon will have 16mm single-perforated film available already striped for magnetic sound. Processing the film in no way affects the magnetic track, either before or after the sound is recorded.

Recording sound on your Soundstriped film is as easy as recording on magnetic tape or wire. Whether you use an RCA or a Bell & Howell magnetic recorder-projector, the method of re-

MAGNETIC SOUND FOR HOME MOVIES

(Continued from Page 162)

Where sound is to be recorded magnetically on the 16mm films you make from now on, you do one of two things: use single perforated Soundstriped or Magna-Striped film in your camera (more and more pre-striped stock is being made available), or you can have your single-perforated 16mm film—either black-and-white or color—striped for magnetic sound after processing, or after editing.

To project these films and reproduce the sound, it will be necessary for you to have one of the two magnetic-recorder projectors mentioned earlier. Or, if you already own a 16mm sound projector, it is possible to have it

adapted for playing both magnetic sound and optical sound interchangeably—a matter that will be discussed at greater length a little later on.

To shoot 16mm films which are to be recorded magnetically, it will be necessary for you to have the sprocket in your present camera replaced with a sprocket having only a single row of teeth. Such sprockets are standard for all sound cameras, and the alteration in average 16mm cameras is a nominal task with corresponding nominal cost. If your camera has a double pull-down claw, that, too, will have to be altered.

Two camera manufacturers already are offering this changeover service to

CAMART PRODUCTS

cording is the same. The latter has one feature not found in the RCA recorder-projector: With the Bell & Howell machine, you can record and playback films at either 24 or 16 frames per second. This feature will prove especially attractive to those with a large library of personal films photographed at 16 f.p.s., and who now wish to adapt them to magnetic sound. The speed for projecting such films does not have to be increased to 24 f.p.s.

The first step in recording sound for your 16mm film, is to plan the sound in advance. Is it to be narration? Narration with musical background and/or sound effects? Post-recorded sync sound? Whatever the scheme, the best results will follow careful pre-planning. The narrative script should be written in advance, timed to match the length of the various scenes or sequences it is to describe. The background music, if any, will have to be plotted as to volume levels, fadeins and fadeouts, etc.

With the Bell & Howell Model 202 magnetic recorder-projector it is possible to record playback music and spoken narrative simultaneously by means of two separate channels. With the RCA machine, the music must be played on a phonograph and picked up by the same microphone that receives the speaker's voice. The Bell & Howell machine also provides for monitoring the sound with headphones. This makes it possible to satisfactorily mix the sound coming in through the two channels—a very professional feature.

The nominal pattern of a recording for a home movie film consists of an introduction of music over the main title, then fading to a low level as the narrator's voice begins. The narration should not be continuous, but should be heard at intervals describing only the most pertinent action or subject material as it unfolds on the screen. In between, the music level can be raised to bridge the gaps between the voice recordings, and this music should be instrumental; where possible, it should complement the mood of the picture or tie in with the subject.

In the beginning, the novice will simply toy with the machine in order to get the feel of it—that is without any advance preparation or narration, etc. But as he gets "the hang" of it, and prepares to do serious recording work, he will then follow the suggestion here to plot his sound on paper first.

The next step is the actual recording. Here, if possible, the projector should be set up some distance from the microphone—preferably in an adjacent room and shooting through a glass window to the screen—in order that the sound of



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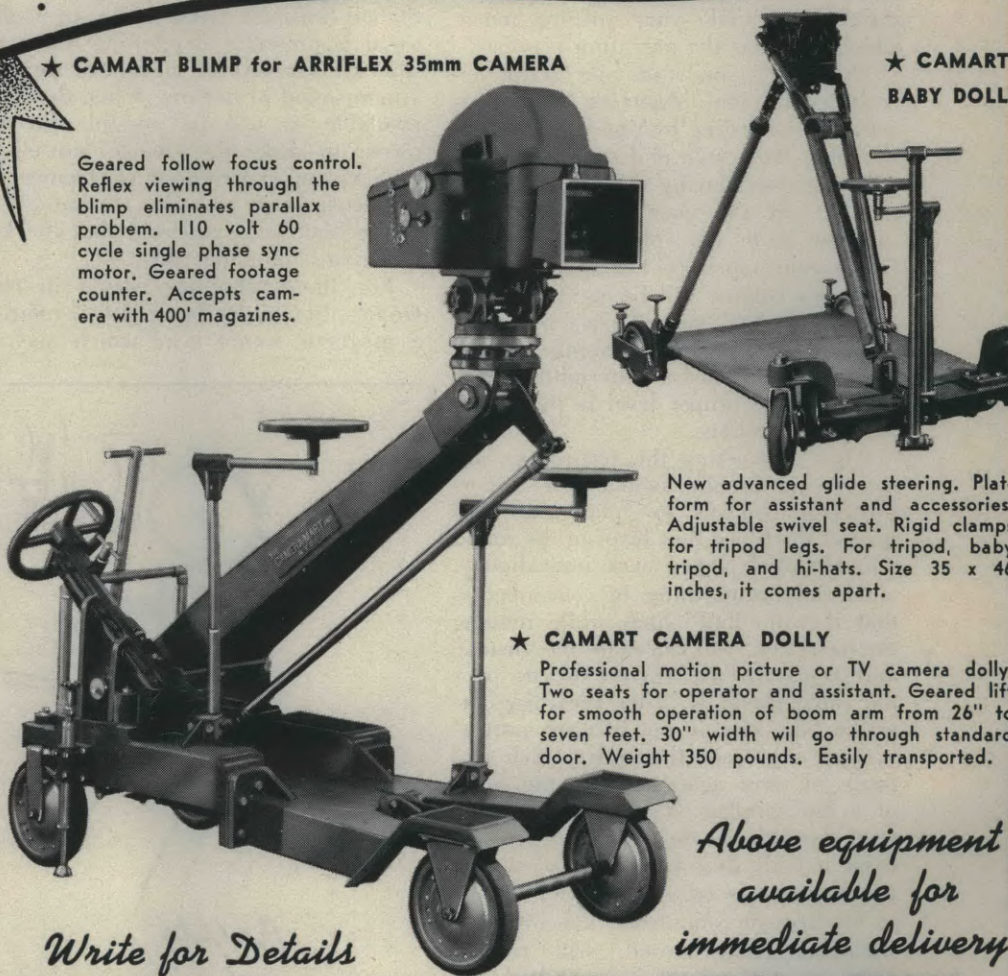
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the projector will not be picked up by the microphone. Another method is to make a sound-proof blimp to cover the machine during projection. This, of course, should provide for escape of heat from the lamphouse and the beam of light to the projection screen.

By carefully scripting the narration in advance and timing it to fit the respective scenes it is to describe, it is possible to record the sound without necessarily watching the picture on the screen. Most amateurs will find it difficult to read a script and speak the narration smoothly with the desired emphasis while watching the picture unfold on the screen. Where music also is to be recorded simultaneously as background, this should be handled separately by a competent assistant.

Thus prepared, you thread the film to be recorded in the recorder-projector, start the motor, and allow ample leader to pass the gate before starting to record. A good idea is to punch 3 holes in the leader—each hole about 8 frames apart—as cue marks preceding the recording starting point. Then, after starting the projector, watch the screen and count the dots as they appear on the screen. The third dot is your signal to start your sound—your opening music which precedes the narration.

Thereafter, you read your script according to plan, observing your stop watch, if recording by time alone, or by watching the screen and script for cues.

In between, during the lapses of narration, you (or your assistant) must raise or lower the volume level of the background music, as necessary.

Proper volume will be maintained by observing the "magic eye" or glow-lamp on the projector—a simple volume indicator that flashes intermittently as sound of the proper level is picked up by the microphone.

After completing the recording, you can rewind the film, switch the recorder-projector controls to "playback" and project the film—thus hearing the sound you recorded played back immediately.

An important thing to remember is that if you "fluff" lines while reading the narration, you can erase the mistake and re-record the correct words over the same track. If, after recording the entire film, you do not like any part of it, you can erase the entire track and begin all over again—within the space of a few minutes. You do not have to send the film out to be erased; you can erase it with your recorder-projector at the flick of a switch.

To provide simulated synchronized dialogue, post-recorded, will require some practice on the part of both the recorder operator and the person or persons appearing in the film. This is best accomplished by making several "dry

runs" with the projector, allowing those who are to speak lines or sing to practice keeping in time with their movements on the screen. With a little careful practice results can be had that few will be able to distinguish from original recording.

Besides providing sound for your home movies of the family, for travel and vacation films, and for movies made of special events, you now will be able to plan and execute many new and interesting 16mm films, such as animated stories with puppets, dramatic films, novelty musical films, and—in even a more serious and important field—educational, promotional and informational films for various local civic groups.

Magnetic recorder-projectors and sound striped film opens up a wide new field of movie making for every serious amateur. Already it has created renewed interest among cine club members, and many old time movie amateurs who had begun to believe there was nothing else left for them to film.

Earlier, we mentioned that present owners of 16mm sound-on-film projectors can have their machines improved with the addition of magnetic recording. In this connection, the Stancil-Hoffman Corporation in Hollywood is presently developing a conversion kit for several models of popular 16mm sound projectors. When these are available, it will be possible for the owner to make the change himself or to have an experienced electronics expert (television or radio mechanic) do it for him. It is expected that the kits will retail for about \$100.00.

For those who are versed in electronics, Stancil-Hoffman also is offering a magnetic sound head which may be

used in converting 16mm sound projectors to magnetic—with the owner making the necessary electronic and wiring changes himself. This piece of equipment, intended for experimenters only, sells for about \$32.50. An erase head also is available at \$37.50.

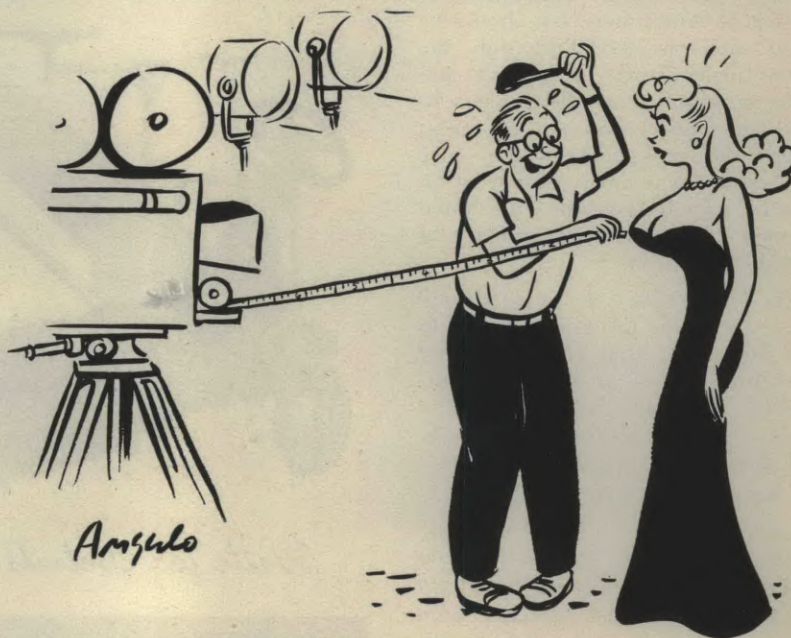
But whether you now own a sound projector or plan to buy one of the new magnetic recorder-projectors, you will have many interesting movie making days ahead of you. One thing nice about this development, it's all so simple. Anyone can add magnetic sound to 16mm films.

FILMING TRAVELOGUES IN 16MM COLOR

(Continued from Page 159)

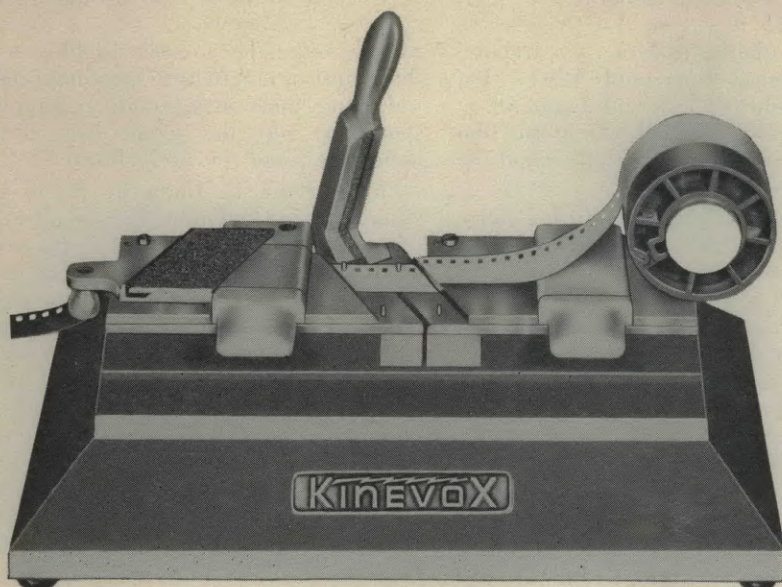
sional photographers often run into restrictions."

As a seasoned world-traveling cinematographer, shooting footage for Dudley's short subjects, Edgar Olsen has encountered some interesting experiences. When he set out last year, along with his assistant Walker LeClair, to travel around the world in quest of footage for "This Land Of Ours," he had no guide book nor charts of do's and don'ts based on experiences of other cameramen who had preceded him. But he travelled light, thanks to 16mm camera equipment, and was able to make pictures where a commercial appearing outfit might have found the going rough. With a Cine Special set up on an ordinary 16mm tripod, Olsen looked just like any other touring amateur movie maker . . . which he used to be, before



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he turned his talents to shooting movies professionally.

Olsen is one of the few professional cameramen who got their start as amateur movie hobbyists. A skier of note, he retired from a successful contracting business in the mid-thirties to devote his time to skiing and shooting 16mm movies. In the summer he took his camera into other fields and subsequently made one of the most notable color films on shooting the rapids of the Colorado river. Warner Brothers bought the film and edited it down to a one-reel short subject which they titled "Facing Your Danger." It won an Academy Award in 1946.

By now, Olsen's camera work had attracted the attention of James Fitzpatrick, producer of shorts for MGM, who engaged him to go to Mexico and Central America to shoot short subjects material for him there. The fact he was not then a member of the cameramen's union soon put a temporary end to his professional career. Carl Dudley, producing 16mm industrial and educational films, then engaged him; during his early activities there, Olsen made application for membership and was accepted in the local cameramen's union. He is perhaps the only former cine amateur to be thus honored.

Today, Olsen still uses the same kind

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of camera he used when first he began shooting 16mm movies—a Cine Special. When he and LeClair set out last year on their first world-girdling trip for Carl Dudley, they flew from Los Angeles to New York, thence to Israel via Ireland, Paris, Geneva, Rome and Athens. Before they touched U.S. soil again, Olsen had shot 31,500 feet of Kodachrome film in Israel, India, the East Indies and the Philippines.

He had to take along almost his entire film supply—30,000 feet of it—because of troublesome export regulations. An additional 1,500 feet of film was shipped to him by air enabling him to complete shooting in the Philippines. Besides his camera, he also brought along a tripod, 6 spare film magazines for his Special, two collapsible reflectors, and a Leica camera. The latter was used for film-strip shots—a by-product of his assignment. In addition, there were such items as baggage—14 pieces in all—which had to be carefully checked in and out each time they changed addresses, encountered new customs officials, or when using native taxis in some areas. Many customs officials in the Orient and India are quite antagonistic to foreign travellers, Olsen said. "They still go by rule books printed over 25 years ago."

In Israel, the starting point of their filming project, Olsen and LeClair found a real "hot spot." On one border of the country, they could look across the bordering terrain of a hundred yards or so and see enemy soldiers ready for any eventuality—and ready to start one at the drop of a hat. When the pair reached the desolate outpost, where Olsen's

script indicated he was to do some shooting with his camera, natives were amazed they had come so far without being fired upon by their warring neighbors.

Before leaving Israel, Olsen's camera had recorded the pictorial highlights of the country's chief cities, most important industries, most of its famous geographic spots, the way the people live, native handicrafts, and the agricultural life.

On arriving in India he found the situation quite different. The people were friendly, often a little too inquisitive. The innate curiosity of the men and small boys often made camera work difficult. The women on the other hand stayed out of camera range. Indian women are not permitted to look at a camera, and although it is possible to photograph some of them, it takes a great deal of persuasion.

"We found that a competent and intelligent native guide is a big asset in shooting movies in countries of the far east," said Olsen, "especially if he has some knowledge of photography. Those who are professional guides know all the governmental red tape, native taboos, and in most cases all about the most interesting pictorial points of their respective countries. They are amazingly astute politically, too, and this is important for what it can contribute toward slanting your photographic coverage."

In the Philippines, Olsen encountered more cunning among those he dealt with than elsewhere. Most of the guides, he said, made outrageous demands. "As in most countries of the far East, every time you set up your camera some 'official' virtually pops out of the ground

Scene Slate Elevator

FRANK PLANER's assistant employed ingenious method of getting the scene slate before camera when shooting was done from high up on a 25-foot parallel for scenes for Columbia Pictures' Technicolor feature, "The 5000 Fingers Of Dr. T."

Slate was attached to one end of sturdy bamboo pole and hoisted before the camera lens just before each take was to begin. Picture is Planer's first Technicolor photography assignment and stars Peter Hayes and Mary Healy. Supporting cast includes Tommy Rettig, Hans Conried, and Bob and Jack Neasley.



to demand knowing what you are doing with a camera," said Olsen.

Before starting out on his 'round-the-world filming jaunt, Olsen was given comprehensive scripts covering the several short subjects he was to shoot. Based on extensive research of reliable published material, these scripts were prepared by Carl Dudley's writing staff and they indicated the format of the subject scene by scene—admittedly pretty tough instructions for a man assigned to shoot documentary-travelogues. Needless to say, Olsen was not always able to get every shot exactly as visualized by the script writers; so he shot alternate footage—something like 8 to 1.

With his Cine Special camera set up for a scene, Olsen also focused his Leica on it and simultaneously made still shots in color for film strips of the same subject.

There is no waste in the extra footage Olsen shoots. What is not used in the "This World Of Ours" short subjects is carefully catalogued and filed away in the Dudley film vaults. Here is being assembled a vast stock shot library which someday will pay off handsomely—especially when color television becomes reality.

With Carl Dudley since 1944, Edwin Olsen is regarded one of the best all-around documentary cameramen in his respective field. Dudley has said that Olsen is the only cameraman he'd send around the world with a camera and film and give him *carte blanche* in shooting. Olsen's record also stands out in another respect, too. More of his 16mm photography has appeared on theatre screens in 35mm blowups than that of any other single 16mm cinematographer.

OSCAR WINNERS

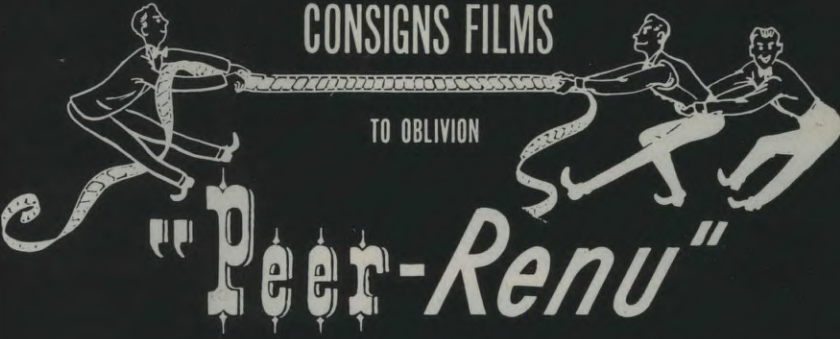
(Continued from Page 157)

The selection of Paramount's "A Place In The Sun" for the best cinematography award in the black-and-white class also surprised many pre-award pollsters and wisecracks who believed that it was a toss-up between Warner Brothers' "A Streetcar Named Desire," photographed by Harry Stradling, A.S.C., or "Death Of A Salesman," photographed for Columbia by Frank Planer, A.S.C. Already Planer had won the Hollywood Foreign Correspondent's Golden Globe award for photography of this production. William Mellor's camerawork on "A Place In The Sun" was tremendously effective in enabling director George Stevens to sharpen and refine a great literary work into a great motion picture, which was itself an Academy Award nominee for best pic-

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American Cinematographer

Richard Day, "A Streetcar Named Desire."

Best Art Direction, Color: Cedric Gibbons, Preston Ames: "An American In Paris," MGM.

Best Set Decoration, black-and-white: George J. Hopkins, "A Streetcar Named Desire."

Best Set Decoration, color: Edwin B. Willis, Keogh Gleason, "An American In Paris."

Best Film Editing: William Hornbeck, "A Place In The Sun."

Best Costume Design, black-and-white: Edith Head, "A Place In The Sun."

Best Costume Design, color: Orry-Kelley, Walter Plunkett, Irene Sharaff: "An American In Paris."

Best Sound: "Douglas Shearer, "The Great Caruso," MGM.

Runners-up in the race for cinematography awards were the following ten directors of photography:

Leon Shamroy, A.S.C., "David and Bathsheba," Fox.

Robert Surtees, A.S.C., "Quo Vadis," MGM.

Charles Rosher, A.S.C., "Showboat," MGM.

John F. Seitz, A.S.C., and W. Howard Greene, A.S.C., "When Worlds Collide," Paramount.

Frank Planer, A.S.C., "Death Of A Salesman," Kramer-Columbia.

Norbert Brodine, A.S.C., "The Frogmen," Fox.

Robert Burks, A.S.C., "Strangers On A Train," Warner Brothers.

Harry Stradling, A.S.C., "A Streetcar Named Desire," Warner Brothers.

In all, ten 1951 productions were nominated for cinematography awards by the Academy. Five were color productions and five, black-and-white. The above named runners-up as well as those in the other awards classifications will each receive a Nomination Certificate from the Academy—no little honor in itself, for often only a very few votes separate the also-rans from the Award-winners.

THE GEORGE EASTMAN House of Photography in Rochester has received a gift of \$100,000 to be used for acquiring and preserving historical motion pictures for further study and for showing at the Dryden Theatre of Eastman House.

Ninety percent of the films now existing from the old days of the 57-year history of motion picture industry, are on early nitrate stock and face possible destruction from advanced deterioration within the next ten years. With the funds now available, copies can be made of these perishable and inflammable old films on modern acetate safety stock which, with proper care, should last indefinitely.



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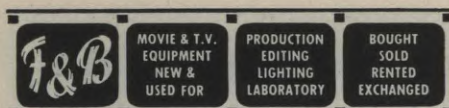
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SINGIN' IN THE RAIN—*Photographed in Technicolor by Harold Rosson, A.S.C. Produced by Arthur Freed for Metro-Goldwyn-Mayer.*

Admittedly, musicals, with their ever-present dance numbers, present a problem for the cameraman—the problem of giving the photography of dance numbers a fresh new approach. This is a matter, of course, which begins to receive attention in the very beginning of the picture's planning; nevertheless, it is the director of photography's responsibility to work out the new and intricate camera instructions dreamed up by the writers and producers.

In this picture, both Gene Kelly and Donald O'Connor virtually reach their zenith in dancing versatility, and Hal Rosson has captured their intricate routines beautifully.

Early in the picture there is a zaney routine by O'Connor in which he just about knocks himself out and the cameramen, too.

To capture this routine in all its intricate ramifications, it was necessary to keep the camera moving all the time, and for this exceptional maneuver considerable credit also is due Rosson's camera crew.

The story, which stars Gene Kelly, Donald O'Connor, Debby Reynolds and Jean Hagen, is a gay, tuneful spoofing of the picture business in the late twenties. The production numbers are spectacular, the sets gay, and there are two dance numbers that definitely are enhanced by Rosson's skillful camera work. The most memorable, of course, is the big number with Gene Kelly dancing in the rain.

THE MARRYING KIND—*Photographed in black-and-white by Joseph Walker, A.S.C. Produced by Bert Granet for Columbia Pictures Corporation.*

This picture falls far short of "Born Yesterday," Judy Holiday's initial smash hit, also produced by Columbia and also photographed by Joseph Walker.

However, Walker has given this new Holiday starrer all the skillful lighting and camera treatment that highlighted the earlier picture. "The Marrying Kind" has Miss Holiday teamed with newcomer Aldo Ray in a skit consisting of a series of domestic squabbles. Overly-wordy, the picture is shy on that kind of action that characterized the first Holiday vehicle.

Much of the production was shot on location in New York and these exteriors display excellent lighting and camera treatment.

Walker's studio interiors are marked by his usual smooth lighting that exactly fits the mood called for in each scene. His moving camera shots in the post-office, especially when following the players moving in the postoffice conveyor system, are skillfully done. Miss Holiday's closeups are all that could be desired.

THE SNIPER—*Photographed in black-and-white by Burnett Guffey, A.S.C. Produced by Edna and Edward Anhalt for Columbia Pictures Corporation.*

The sex criminal and what to do about him form the theme of this well-photographed production starring Adolphe Menjou and Arthur Franz.

Exteriors for the production were filmed in San Francisco, a city that has been photographed many times for motion pictures, but never as for this story. Here the locales were back alleys, dingy streets, and parts of the warehouse section of the city. It called for frank and incisive photography having a grim mood complementary to the story.

The full scope of the art of cinematography was employed by director of photography Guffey to give the picture the maximum dramatic emphasis in these natural locales. The way the photography was planned to dramatize characters or situations, such as the high shots looking down on the fleeing lad; the protagonist's eye-view of the situation; the use of a high-mounted camera to follow Franz in his flight through the warehouse district—all of this was skillfully executed; there was none of the cut and dried static formula of camera treatment we see in so many "action" pictures today.

The night sequences are exceptionally good, and the exteriors shot in the soft overcast lighting so characteristic of San Francisco give scenes a realistic touch most appropriate for the story mood. The interiors, too, are lighted and photographed in a manner that shows a studious effort to avoid the common-place camera treatment too often given to modest budget films.

FIVE FINGERS—*Photographed in black-and-white by Norbert Brodine, A.S.C. Produced by Otto Lang for Twentieth-Century Fox.*

James Mason is a trusted embassy employee who sells British war secrets to the Nazis in this tautly paced story with a World War II European locale. A great deal of the action takes place in Turkey and for many of the exteriors and for the background plates Norbert

Brodine took his camera crew overseas to shoot scenes in the actual locales, thus giving the story both plausibility and added interest.

Brodine greatly exceeds his "Frogmen" cinematography in this production. Of course, the opportunities were greater. He had the highly interesting Turkish scenes to train his camera upon and this he did with a reporter's instinct for realism and pictorial finesse.

Back at the studio he had to match these sequences for lighting, camera angles, etc., and he followed through with his customary skill.

Here is a swell piece of entertainment, made all the more provocative by the combination of Mankiewicz, the director and Brodine, the cinematographer supreme.

STEEL TOWN—*Photographed in Technicolor by Charles Boyle, A.S.C. Produced by Leonard Goldstein for Universal-International Pictures.*

"Steel Town" is the first film in Hollywood history to dramatize the process of steel making.

Director George Sherman took his technical crews and stars Ann Sheridan, Howard Duff and John Lund to the huge Kaiser Steel Mill in Fontana, California, where action scenes were shot against backgrounds of a real-life blast furnace, coke oven, open hearth and rolling mill.

When arrangements were made to use the Kaiser location, the steel company officials made it clear that the war effort demanded maximum production on a 24-hour-a-day basis. Consequently, production of steel had to be carried on simultaneously with the shooting of scenes there. There could be no special arranging of equipment. Scenes would have to be shot as the plant worked.

Boyle and his camera crew faced the challenge optimistically and came up with a bang-up pictorial job. They worked throughout the two-week location with giant hot metal cranes moving overhead carrying 90,000-pound ladles each filled with 200 tons of hot pig iron.

The two major problems faced by Boyle were that of the extreme heat, and the unusual colors coming from the furnaces and the molten metal. But he had faced just such a situation many years before when he filmed the first Technicolor commercial film on the steel industry for United States Steel Corp. in 1938. In filming the U-I picture, the heat was so intense that fresh cold towels were thrown over the cameras every ten minutes to protect film and camera parts.

Photographically, the mill scenes are expertly done, and as one reviewer has said, "the photography looks like cameraman Boyle had enjoyed every minute of it." **END**

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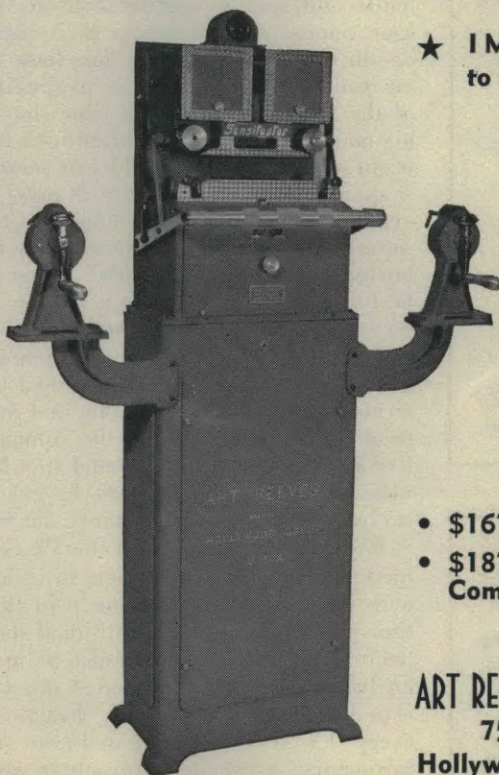
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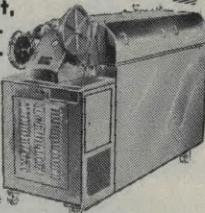
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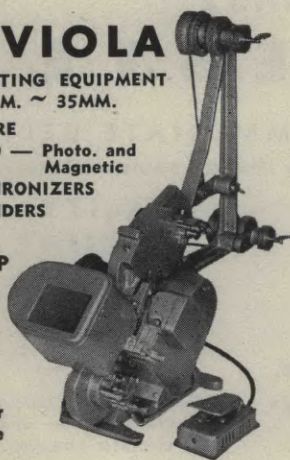
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TV FILM COMMERCIALS

(Continued from Page 160)

a fraction of the cost of spots produced by large studios for national sponsors. Although the overall quality may not match that of the studio product given the benefit of greater experience, equipment and resources of the studio, films can be turned out that will have greater appeal and selling punch than either slides or live-commercial presentations.

Many such advertising films are produced by staff members of independent TV stations as part of the station's service to advertisers. The films to be discussed here are silent—the commentary being provided by a staff announcer reading prepared copy as the film is telecast. When desired, suitable recorded music may also be played as background.

There exists in this method, of course, the possibility that the announcer may fluff the commercial. This is not always a serious disadvantage—certainly not as serious as a fluff by an actor making a demonstration of a product—a situation which is automatically eliminated when the presentation is put on film.

There is one great advantage, too, in using live narration over sound on film, in that the copy can be changed weekly or even daily to fit the needs of the sponsor.

Today, television commercials or spot announcements have been established in three standard lengths: the one-minute spot, the twenty-second spot, and the ten-second spot or station-identification spot. Sponsors usually make their choice on the basis of ability to purchase the air time involved, and the availability of the various commercial time slots in his market area commensurate with best programming for his product or service. A sponsor marketing children's toys, for example, would wisely choose a ten-second spot at 5:59:30, immediately following the "Howdy Doody" program, in preference to selecting a longer 20-second spot later in the evening.

TV time periods for spot announcements, like those for radio, are exact in terms of fractions of a minute and must be dealt with precisely in the comparative length of film. A 20-second spot film (16mm), for example, must be exactly twelve feet in length—no more, no less.

We have established that the TV commercials being dealt with here are silent, with live audio, and are made in three time-period lengths. An additional specification is that they should also be made on 16mm film, photographed at standard sound speed of 24 f.p.s. Practically every TV station now has 16mm film projectors; a few in metropolitan areas also have 35mm projectors.

In considering the content of spot announcement films, live action and plain titles are within the scope of any 16mm cameraman and his equipment. Often many commercials can be given a high degree of professional polish by the addition of simple animation of either the product or the superimposed text. Lap-dissolves also have a place in compressing action into the limited time interval. Such effects can be accomplished where the camera used is equipped with single frame release and there is means for winding back the film in the camera. Where cameras such as the Cine Special are used, dissolves may be made easily and automatically by means of the manual control provided by the camera's adjustable shutter.

Who are potential clients for film commercials? Mostly they are those already advertising on television and using live or slide presentations. Spending a few evenings before your TV set will yield a list of such potential sponsors who might be persuaded to put their advertising message on film for more effective results. Then there are those businessmen not yet committed to television. Many would buy TV time if they were assured an effective method of presenting their product or message via video. This, of course, is where film is the most effective.

Prospects who could use TV commercials to advantage include local department stores, jewelry stores, personal loan companies, clothing stores, gift shops, ice cream companies and dairies. Entertainment purveyors, such as fairs, amusement parks and roller rinks will find television advertising particularly productive results. Often the best sponsors are found among wholesale houses, where their advertising can be made to benefit a number of local outlets and the cost therefore may be spread over a more substantial share of resultant sales. Frequently, where local merchants advertise products on TV, the jobber or wholesaler will enter a cooperative deal whereby they assume part of the advertising cost. A simple spot announcement of this type might be a fifty-second commercial extolling the merits of the "Atomic Waffle Iron," followed by a ten-second "tag" at the end listing names and addresses of local merchants handling the product.

So much for the selling angles of the TV commercial.

The actual production requires knowledge of the pictorial composition necessary for good TV reproduction, as well as an understanding of the density problem. Both of these factors materially

affect the ultimate pictorial quality on the home TV receiver screen, and if the quality is not satisfactory, the sponsor's message suffers.

The television pickup camera, the transmitter itself, and the average home receiver all introduce a measure of picture degradation. While the results may not always be too bad in the original film, the distortion introduced by the reproducing and transmitting processes frequently serve to exaggerate the original defects to a point where the final screen result is hardly acceptable. Obviously, then, it is important that the TV advertising film be of the best quality.

Space does not permit going into detail as to the technical qualities of films for television. Many excellent works have been published on this subject. One that can be recommended is "Movies For TV" by John H. Battison. Some of the immediately important points to be considered are as follows:

Framing: Because the average home TV receiver does not show the entire picture area established for motion pictures (i.e., the 3 by 4 ratio) those making films for TV must keep in mind the actual TV tube area and frame scenes, titles, etc., accordingly. This is especially important in filming titles; here it is necessary to leave ample space between the text and the four margins of the reproduced picture area.

Resolution: Due to the construction of present-day TV receivers, one cannot expect resolution to exceed 180-200 lines per inch. This means that best picture results follow where the set or title card makeup is kept simple—not "busy." Fine print in labels and titles therefore, rarely is discernible on the TV screen.

Ratio: Because television yet is unable to reproduce all the shades of grey between black and white, contrast in compositions must be given special attention. While a good film for theatre screens may have a contrast ratio of forty to one, a TV receiver is considered in excellent condition that can produce a ratio of twenty to one.

This fact has created considerable discussion as to what is the proper procedure for lighting in making TV films. In the beginning, extremely flat lighting was considered the most desirable. "Light as if for color," was the general advice. Then it was discovered that this procedure resulted in the foreground melting into the background—no separation. Today, plenty of even illumination, augmented by substantial highlights or backlight will render desirable separation between the object photographed and the background for television films.

Film: Any standard fine-grain reversal stock may be used for making black-and-white TV films. Film speed, of course, will depend upon lighting condi-

tions. The reversal or original can be used for editing. Use of original for telecasting purposes is not to be recommended, unless the film is to be given only a single projection. Otherwise, have a dupe-negative made of the original, even though the result may be slightly more contrasty than desired. From this the release prints are then made. If there isn't a competent film laboratory in your area, your film may be air-mailed to anyone of the several major labs situated in New York, Washington, D.C., Chicago, St. Louis, Los Angeles, and San Francisco. Prompt service is available from all.

The modest producer of TV commercial films, about whom we are concerned here, will undoubtedly also handle the "scripting" of such films. If he has an associate who can do this phase of the production, all the better; but in most cases, it is part of the overall production chore of the lone spot film maker handling this function for independent television stations. Here, again, is another subject to which a whole volume could be devoted. The small producer can secure a valuable education in scripting by studying spot TV commercial films appearing on his home receiver.

Generally speaking, the average one-minute commercial format will contain the sponsor's name, sometimes his address, and a presentation of his product or service. Combining live action with animation is considered more effective than using either exclusively. The twenty-second spot is paced faster; only the most pertinent selling points can be shown. These may have to be pointed out instead of demonstrated. Often the twenty-second spot is cut from a one-minute spot. In some cases, the two formats may be worked out together at one filming so that the animation sequence in the full-length spot serves as the twenty-second spot when used alone. The ten-second spot is frequently the most difficult to produce with the most effective results. The station-break spot must also include the station's call letters, both audio and visually. Usually it is considered satisfactory to superimpose the call letters and channel number in one corner of the screen for the full ten seconds. Of this time, four seconds are allotted the announcer to make the break orally, leaving approximately three-quarters of the screen time for the sales message, and six seconds for copy.

An example of a typical script pattern is one which we prepared at WFMY-TV extolling the merits of fresh oranges. It was for a one-minute spot:

Opening is simply the tradename of the orange—white letters on black background, made in a titler. Shot of bowl of oranges, decorated with holly, fades in behind title. Audio copy meanwhile

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Current Assignments of A.S.C. Members



Major film productions on which members of the American Society of Cinematographers were engaged as directors of photography during the past month.

★ ★ ★ ★

★ ★ ★ ★

Columbia

- JOSEPH WALKER, "Affair In Trinidad," with Rita Hayworth and Glenn Ford. Vincent Sherman, director.
- BURNETT GUFFEY, "Assignment — Paris," with Marta Toren, Dana Andrews, George Sanders and Audrey Totter. Phil Karlson, director.
- FRANK PLANER, "The 5000 Fingers Of Dr. T," with Peter Lind Hayes, Mary Healy, Tommy Rettig, Hans Conried, Bob and Jack Heasley. Roy Rowland, director.
- HENRY FREULICH, "Last Train From Bombay," (Esskay Prod.) with Jon Hall, Liss Ferraday. Fred Sears, director.
- PAUL IVANO, "Strange Fascination," (H. H. Prod.) with Hugo Haas, Mona Barrie, Cleo Moore and Rick Vallin. Hugo Haas, director.
- FAYTE BROWN, "Kid From Broken Gun," with Charles Starrett and Smiley Burnette. Ray Nazarro, director.

Independent

- CLYDE DEVINNA, "The Jungle," (Voltaire Prod., shooting in India) with Rod Cameron, Cesar Romero, and Marie Windsor. William Berke, director.
- STANLEY CORTEZ, "Abbott And Costello Meet Captain Kidd," (Woodley Prod.) with Bud Abbott, Lou Costello, Chas. Laughton. Charles Lamont, director.
- WILLAM BRADFORD, "Port Sinister," (Amer. Pictures) with James Warren, Lynne Roberts, Paul Cavanaugh. Harold Daniels, director.
- ERNEST MILLER, "Hellgate," (Commander Films) with Sterling Hayden, Joan Leslie, Ward Bond. Charles M. Warren, director.

M-G-M

- RAY JUNE, "Eagle On His Cap," with Robert Taylor, Eleanor Parker, James Whitmore, Marilyn Erskine and Larry Keating. Norman Panama and Melvin Frank, producers-directors.
- HAROLD LIPSTEIN, "Fearless Fagan," with Janet Leigh, Carleton Carpenter, Keenan Wynn and Richard Anderson. Stanley Donen, director.
- WILLIAM SKALL, "Everything I Have Is Yours," (Technicolor) with Marge and Gower Champion, Dennis O'Keefe, Monica Lewis and Dean Miller. Robert Z. Leonard, director.
- GEORGE FOLSEY, "The One Piece Bathing Suit," (Technicolor) with Esther Williams, Victor Mature. Mervyn LeRoy, director.
- CHARLES ROSHER, "Story Of Three Loves," (Technicolor) with Moira Shearer, James Mason. Gottfried Reinhardt, director.
- ROBERT PLANCK, "Lili," with Leslie Caron, Mel Ferrer, and Zsa Zsa Gabor. Charles Walters, director.
- WILLIAM DANIELS, "Plymouth Adventure," (Technicolor) with Spencer Tracy, Gene Tierney, Van Johnson. Clarence Brown, director.
- WILLIAM MELLOR, "Letter From The President," with Shelley Winters, Ricardo Mon-

AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED January 8, 1919, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios. Its membership also includes non-resident cinematographers and cinematographers in foreign lands. Membership is by invitation only.

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talban and Claire Trevor. William Wellman, director.

- PAUL C. VOGEL, "You For Me," with Peter Lawford, Jane Greer, and Gig Young. Don Weis, director.

Monogram

- JACK RUSSELL, "Arctic Flight," (Lindsley Parsons Prod.) with Wayne Morris, Lola Albright. Ewing Scott, director.
- MARCEL LEPICARD, "Plow Jockeys," with Leo Gorcey, Huntz Hall, Anne Kimbell, et al. William Beaudine, director.

Paramount

- ERNEST LASZLO, "Stalag 17," with William Holden, Don Taylor, Otto Preminger, Robert Strauss, Cy Howard, Sig Ruman, Dick Erdman. Billy Wilder, director.
- RAY RENNAHAN, "Hurricane Smith," (Technicolor) with Yvonne deCarlo, John Ireland, James Craig, Forrest Tucker, Richard Arlen and Lyle Bettger. Jerry Hopper, director.

- JAMES WONG HOWE, "Come Back Little Sheba," with Burt Lancaster, Shirley Booth, Terry Moore and Richard Jaeckle. Daniel Mann, director.

- LIONEL LINDON, "Tropic Zone," (Technicolor) with Ronald Reagan, Rhonda Fleming, Noah Berry, Jr. Lewis R. Foster, director.

R.K.O.

- CHARLES LANG, "Sudden Fear," (Jos. Kauffman Prod.) with Joan Crawford and Bruce Bennett. David Miller, director.
- HARRY STRADLING, "Hans Christian Andersen," (Samuel Goldwyn Prod.) (Color) with Danny Kaye, Farley Granger and Renee Jeanmarie, Charles Vidor, director.

20th Century Fox

- LEON SHAMROY, "The Snows of Kilimanjaro," (Technicolor) with Gregory Peck, Susan Hayward, Hildegard Neff, Ann Francis, Helene Stanley, and Ava Noring. Henry King, director.
- MILTON KRASNER, "Darling, I Am Growing Younger," with Cary Grant, Ginger Rogers, Marilyn Monroe. Howard Hawks, director.
- HARRY JACKSON, "Pony Soldier," (Technicolor) with Tyrone Power, Penny Edwards, Thomas Gomez. Joseph M. Newman, director.

Universal-International

- IRVING GLASSBERG, "Sally And St. Ann," with Ann Blyth, John McIntire and Frances Bavier. Rudolph Mate, director.
- CHARLES BOYLE, "The Texas Man," (Technicolor) with Robert Ryan, Julia Adams, Rock Hudson, Judith Braun, John McIntire, and Dennis Weaver. Budd Boetticher, director.
- RUSSELL METTY, "Yankee Buckaneer," with Jeff Chandler, Scott Brady, Suzan Ball, Joseph Calleia and George Mathews. Frederick de Cordova, director.
- CLIFF STINE, "Ma And Pa Kettle At Waikiki," with Marjorie Main, Percy Kilbride, Luri Nelson, Loring Smith, Esther Dale, Faye Roope, and Teddy Hart. Lee Sholem, director.
- CARL GUTHRIE, "The Riding Kid," (Technicolor) with Richard Conte, Viveca Lindfors, Barbara Britton. Leslie Selander, director.
- MAURY GERTSMAN, "It Grows On Trees," with Irene Dunne, Dean Jagger and Joan Evans. Arthur Lubin, director.
- IRVING GLASSBERG, "The Black Castle," with Stephen McNally, Richard Greene, Paula Corday. Nathan Juran, director.
- CHARLES BOYLE, "City Beneath The Sea," (Technicolor) with Robert Ryan, Suzan Ball, Anthony Quinn. Budd Boetticher, director.

Warner Brothers

- TED McCORD, "Danger Forward," with Cornel Wilde, Steve Cochran, Karl Malden, Phyllis Thaxter. Lewis Seiler, director.
- WILFRED KLINE, "April In Paris," (Technicolor) with Doris Day, Ray Bolger and Claude Dauphin. David Butler, director.

plugs the fact "They're back!" Cut to a five-year old girl selecting oranges from a full crate. Girl hands orange to mother off screen. Cut to mother squeezing half an orange (How easy—how much juice per orange!) Then a closeup of girl drinking big glass of orange juice. Cut (3 to 5 seconds) of mother also drinking glass of juice (For children and grownups . . . so healthy!), then back to child as she finishes glass. Next sequence begins with closeup of big empty glass on kitchen sink. Three oranges appear—one, two, three—beside the glass (by stop motion), and then the glass magically fills to brim with juice (again stop motion). Cut to poster with sponsor's name and picture of product for five seconds to end the spot.

The filming equipment used was simple: a Bolex 16mm camera, a tripod, and four RFL-#2 photoflood lamps. Staging was done in a room convenient to studios. A total of 100 feet of black-and-white film was exposed for the one-minute spot, and edited down to the necessary length.

The production of TV spot announcements, described here, takes nothing away from the big professional studios. On the contrary, it contributes ultimately to the business of such companies; the small advertiser would possibly never attempt TV advertising were it not for the local film producer tied in with the station and able to make such films at a nominal rate commensurate with his ability—or desire—to pay. Many such advertisers, once they cut their teeth on the local film product, progress to more ambitious TV advertising programs. And it is at this point that the larger, better-equipped producer usually takes over. In the meantime, however, the local television station and its clientele of revenue-producing sponsors have been well served.

FILMING 'VIVA ZAPATA!'

(Continued from Page 155)

ata" are characterized by richly graphic lighting that produces an effect of boldly modeled charcoal drawings come to life. In these scenes a minimum of fill light was used. The result—a style of photography full of gutsy realism. When the lighting changes to low key, as it does in the love sequences, there is a mellow quality accentuated by rim-lighting and back-lighting. In keeping with natural light sources, the characters sometimes walk from light into darkness, so that their faces are completely shadowed—a far cry from conventional feature production in which the stars' faces must be clearly visible at all times.

The main problem in lighting these

interiors was the fact that because they were actual buildings on location, there were no breakaway walls and overhead catwalks for the convenient placing of lights. It was a major problem to get lamps, camera, cast and crew into some of the smaller rooms used as sets.

In "Zapata," camera and direction are so perfectly integrated that it is difficult to tell where the effect of one leaves off and that of the other begins. This unity of technique is the result of the very closest co-operation between director Kazan and cinematographer MacDonald who had previously worked together on two 20th-Fox features, "Pinky" and "Panic In The Streets." Before production began on "Zapata" Kazan and MacDonald thoroughly discussed action patterns and mood, carefully pre-planning the camera angles and lighting.

"Gadge" Kazan is a cameraman's director," MacDonald explains. "He encourages originality and fresh approach. Furthermore, he's willing to throw convention out the window to get a daring camera effect. All through the filming of 'Zapata' he kept encouraging me to 'be bold!' This meant that the camera was free of the restrictions and inhibitions that sometimes hamper the creative photography of a film. We were free to adopt any camera angle or effect that would help tell the story more dramatically."

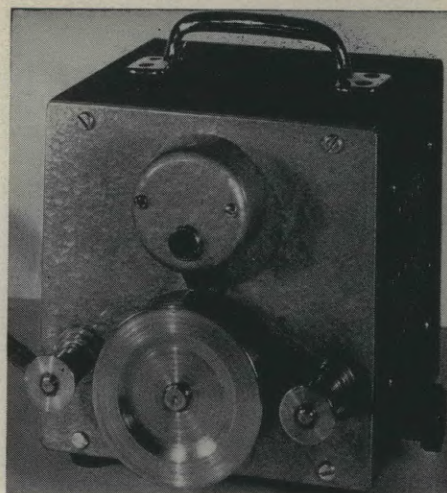
MacDonald is not the man to dream up complicated, high-sounding theories about cinematography. His one basic tenet is: "Keep it simple!" Nevertheless, he is a serious student of the aesthetics of photography—and recently, while on location in Europe shooting background scenes for "Diplomatic Courier," he spent long hours in the Louvre Museum studying the composition, color and lighting of the world's foremost painted masterpieces.

He started his motion picture career 30 years ago and has been at Fox continuously since 1929. In 1935 he was made a director of photography, and his initial assignment was a Spanish language film titled "Rose Of France." In recent years he has photographed such outstanding features as "My Darling Clementine," "Pinky," "Fourteen Hours," "Panic In The Streets," "Yellow Skies," "Down To The Sea In Ships," and, of course, "Viva Zapata." He is currently completing work on his first Technicolor assignment, John Ford's production of "What Price Glory."

Producers Jerry Wald and Norman Krasna are establishing annual awards for the best films made by students of film production at American colleges. Entries will be judged by a board of 10 film producers who will select winners in best writing, directing, and camera work.

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WHAT'S NEW

in equipment, accessories, service

Kodak Photo-Light Bar for home movie making has been announced by the Eastman Kodak Company, Rochester, N.Y. Lighting unit is suitable for use with either 375-watt medium-beam Reflector Flood lamps or 500-watt reflector Flood



photo lamps, etc., with retractable power cords. Holds 18 feet of heavy-duty rubber covered cord, and is equipped with a molded plug.

Unit has built-in tension lock to stop the cord and an automatic re-wind. Price is \$5.95.

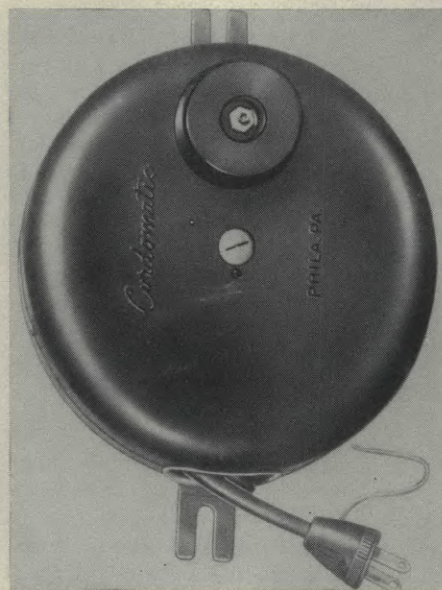
MagnaStripe Service—Ryder Services, Inc., 1161 No. Vine St., Hollywood 38, Calif., announces the addition of Magna-Striping to the long list of services offered the 16mm semi-professional, professional and TV film fields.

Magna-Stripe is a narrow 50-mil stripe of iron oxide placed on one edge of 16mm films to provide instant magnetic recording on the film. A small balancing stripe of the material is also applied to the other film edge to facilitate easier re-winding and rolling of the film. Magna-Stripe service costs 3½¢ per running foot.

or Spot lamps. It can be used with any movie or still camera having standard tripod socket.

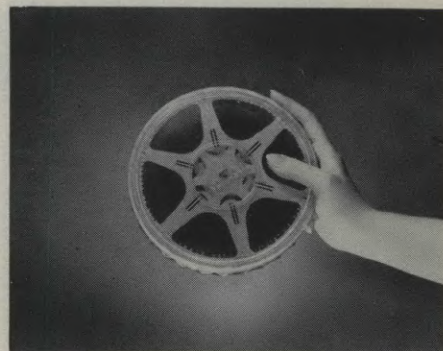
Swivel-arms provide for concentrating light of both lamps on objects closeup. Each lamp socket has independent switch. A ten-foot extension cord extends from the right-hand lamp socket. Unit is available at Kodak dealers at \$8.65.

Cordamatic Reel—A new handy spring-back Cordamatic reel is announced by Air Photo Supply Corp., 555 East Tremont St., New York 57, N.Y.



Reel, which makes possible improving movie projectors, darkroom enlargers,

Plastic Reel Can—Newest in film cans for 16mm movie makers is a new Kodascope transparent reel can just announced by



Eastman Kodak Co., Rochester, N.Y.

Made of polystyrene plastic—a product noted for its quality and wearability—the new can is so completely transparent that the complete contents of the can are visible at all times. Titles written or pasted on the reel can be read at a glance, and—even more important—a movie maker can see in a moment how much space is left unfilled on any reel.

The new Kodascope Transparent Reel Can will be priced at \$1.60 including one 400-foot reel, or it will be available separately at 90 cents.

Ampex Tape Recorders—Kinevox, Inc., 116 So. Hollywood Way, Burbank, announces they have been appointed sales representatives for the well-known Am-

(Continued on Page 186)

CLASSIFIED ADVERTISING

RATES: 10c per word—minimum ad \$1.00. Words set in capital letters, 15c per word. Display format 90c per line.

FOR SALE

NEW: "Newmade" Double 35 Hub Synchronizer in original sealed Carton, \$79.50.

BELL & HOWELL Standard Camera with fearless movement, motor, Tach. 35mm. 2 Carrying cases \$1,575.00. B. & H. finder \$115.00 extra.

BELL & HOWELL 1,000 ft. Magazines \$125.00, 400 foot \$65.00. NEW 400 ft. Wall \$85.00. Cases for Cameras, Magazines, Cheap.

NEW: Mitchell Baby Tripod \$65.00, High Hats \$15.75, Arri. \$27.75, Cineflex \$9.50. Mitchell 12 Volt Motor and Cable, switch, like new \$388.00.

Eyemo, Cooke Lens, case, like new \$165.00. 16MM Printer (table model) 400 ft. capacity, motor driven \$279.00, another reconditioned Eastman \$285.00.

BELL & HOWELL Spider Turret 16MM Camera \$85.00 motor provision extra.

DeVry 35MM newsreel camera 100 foot, spring drive F 2.7 Zeiss \$112.00, Case \$9.00.

TREMENDOUS 8-16 Sound, silent film National Library, free membership also sales.

35MM Portable fireproof Projection booth (Metal) \$135.00.

New Folding 6x8 Projection screens \$37.50, 8x10 \$49.75, portfolio case \$2.85 extra.

R.C.A. 16MM galvanometers (newsreel) \$75.00, studio \$115.00, for 35MM \$185.00.

8-16-35, Reels, cans, shipping cases, rewinds, splicers, new, used at great savings.

Rolleflexes, Leica, contax, Realist, speed graphics, Linhoffs, studio, copying, plate cameras, lenses, real Bargains.

8-16-35 Silent Sound Projectors new, used, famous makes, lowest prices.

Parts, thousands, correspondence invited.

Raw stock, subjects, shorts, features,

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200 Foot Cine special **double frame** Magazine \$225.00.

Sept. 35MM 3.5 Camera \$59.00 with magazines. Zeiss 35MM magazine camera F 2.7 \$68.50 (movie).

Bolex H 8 Camera 1/2" lens like new \$169.50. Bolex Synchronous motor and adapter \$107.00.

Bell & Howell standard tripod like new \$125.00. Mitchell, Sr. tripod excellent \$200.00.

Akeley flathead senior tripod \$85.00. Battery motor for cine special \$72.00.

8-16-35 Perforators, slitters.

NEW 500 Watt Focusing spotlights with Tripod and tilt \$35.50.

BELL & HOWELL 35, Bi-pack 400 foot magazines like new \$229.00.

BELL & HOWELL Model H Camera, 1" lens like new \$455.00, 400 foot Magazines for same \$100.00 extra.

Mitchell, Bell & Howell, DeBrie, Eyemo, Pathe, Universal, Akeley, Triflex, Cineflex Wall lenses at attractive prices. State your wants 1/2" to 28 inches.

16-35MM soundscibers and Moviolas.

BELL & HOWELL Studio 4 lens type 35MM camera, with 110 Volt Universal Westinghouse Motors, 400' Magazine, Camera number over 1020, like new with Bell & Howell High speed shuttle. Special \$2,600.00 with trunk.

CINEPHON—latest Model 35MM Camera, 6 volt motor, turret with new lenses, 30MM F 1.5, 50MM F 1.9, 75MM F 1.9, 3-200 foot Magazine, Tach, forward and reverse.

Dissolve hand crank, spring drive, 4 filters, sunshade and filter holder, case \$895.00, a swell buy.

16MM Bell & Howell Superspeed camera slightly used, clean \$175.00.

16MM Berndt Maurer Film Recorder with three 400' magazines, A.C. Power Unit and recording Amplifier, Western Electric Earphones, cables, three cases, like new condition. \$995.00.

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MAURER Film recorder, model D, 400' magazine, sync motor, case 995.00

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AURICON CINE VOICE single system camera complete with sound accessories 550.00

CINE-SPECIAL I camera, excellent, 15mm, 25mm, 63mm lenses, extra 100' chamber, case, Estman tripod 695.00

CINE-SPECIAL II camera, like new, 25mm, 63mm lenses, with extra 100' and extra 200' chambers, case, value over \$1,800.00; specially offered at 1,245.00

CINE-SPECIAL 100' film chambers, excellent 100.00
200' film chambers, excellent 225.00

AURICON synchronous motor 110.00

NEW SUPER PATHE 16mm camera 350.00

COLORTRANS 750 kit, 3 spots, 1 broad, 4 stands, converter, case, used, excellent 209.50

Colortran 2000 kit, 2 floods, stands, converter, case, used, excellent 109.50

Colortran 5000 kit, 2 floods, stands converter, case, used, excellent 159.50

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NEW 16MM MAURER Professional camera, 235° shutter, 15mm Schneider Xnon T.2 in special mount, 25mm Ektar T.1.4 columnated, Ektar 15mm reduction lens for 25mm 1.4, 40mm Ektar T.1.6, 75mm Hugo Meyer T.2.8, 102mm Ektar, 152mm Ektar. All lenses selected from careful optical bench tests. All lenses T. stopped, columnated, and calibrated to camera. **SYNCHRONOUS** motor, 12v variable speed big tachometer, special 16 volt wet cell batteries charger and case. Two 400' magazines. Special rubber lined carrying cases and Maurer's bigger case. Pro Jr. wide base tripod in fiber case, baby and high hat. Everything in perfect condition. \$4,870.00. **HASKELL PETE WEXLER**, 6240 N. Hoyne, Chicago 45, Illinois.

AUDIO AKELEY single system sound camera complete with Akeley sound head, Gyro tripod, 3 lenses, view finder, Maurer mixing amplifier. Complete with cables, power supply and W.E. microphone. Also 35mm. Blue Seal Sound Recording equipment.

CAMERA EQUIPMENT CO., 1600 Broadway, NYC 19, N. Y. Cable: Cinequip.

CINE-KODAK Spec. II. Brand New Kodak Cine Ektar 25mm. f/1.9 Lens, Yolo Dissolve, Camera Equip. Sync. Motor and Prof Jr. Maurer Type Tripod. Par Reflex Finder Magnifier. Par 400-foot Magazine Adapter. Two 400-foot Mitchell Magazines. Carrying Case. Complete Set: \$1,895.00. **McFARLAND**, 448 Harrison Ave., Greenville, Ohio. Tel. 870-R.

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MITCHELL STANDARD 35mm camera, compl. outfit, exec. cond. info. on request

MOVIOLA 16mm, ULPVCS, sound, composite, preview 8 x 10" screen, rolling stand, ampl., like new

EYEMO, single lens Cooke 2" f2. 5, like new \$ 225.00

ARRIFLEX, 3 Zeiss lenses, 2 mags, case, perf. 895.00

KINEVOX RECORDER, 17 1/2mm sync. tape, like new 1,225.00

MITCHELL 12 v. var. speed motor, case, new 395.00

ACE, 35mm picture viewers, new 159.50

F & B, 18 ft. portable mike boom, used 227.50

KELLY CALCULATOR, sliderule computer 3.95

ALUMINUM TRIANGLES, w. 3 wheels, new 12.95

MODULITE GALVANOMETERS, VA or VD, like new 295.00

BERTHIOT PAN CINOR zoom lens. on order

EASTMAN HI-SPEED 16mm camera, 3000 fps. 1,450.00

ZOOM TITLE STAND, 16mm, scrolls, wipes, etc. 269.00

ASTRO 125mm f2.3 lens for Arriflex 175.00

COOKE 20" f5.6 lens for Eyemo, etc. 375.00

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EYEMO, Model Q, zoom finder, filter slot, 25mm Kinar, 50mm Cooke, 6-inch Cooke, 110 volt or 12 volt motor, 2-400 ft. mags, case 1,325.00

MAGAZINE, chrome, 200 ft. for Cine Special, new 395.00

B-M FOCO SPOT for baby keglite, nsd. 29.50

FILM FOOTAGE COUNTER, electric, 16 & 35mm comb. 165.00

MATTE BOX with arms for Wall camera. 90.00

WALL CAMERA Telephoto lens support & base 85.00

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35MM Animation STAND w/camera, stop-motion, 4 spots, pan turntable, double counters \$2,950.00

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WALL SINGLE SYSTEM 35mm Sound Camera, lenses, motor, finder, sunshade, magazine, tripod, \$7,000 value 4,250.00

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(Continued on next page)

Classified Ads

(Continued from Preceding Page)

FOR SALE

WALL 35MM. single system sound camera, refinished, like new, guaranteed. Complete with 40, 50, 75 and 100 mm. F2.3 coated lenses; Modulte galvanometer; Auricon amplifier, complete with microphone, necessary cables, mike, tripod; camera tripod; erect image viewfinder; two 1000 ft. magazines\$7000.00

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HOUSTON K1A 16mm positive negative developing machine. Perfect condition. All new rollers, refrigeration and heating units, sides recovered with stainless steel, Bubble agitation lines for each tank. Price \$4,195.00. HENRY SCHOFIELD, 2511 West End Ave., Nashville 5, Tenn.

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GORDON ENTERPRISES
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FOOTAGE WANTED

16mm Kodachrome on Inca ruins and Lima, Peru. Also Central American jungle and Spanish ruins. Must be professional quality. Box 1147, AMERICAN CINEMATOGRAPHER.

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TWENTY years of photographic experience has given me knowledge of color, light and composition. Have beautiful new Maurer with superb Ektars, heavy tripod, hi-hat, converter, battery, charger, dolly, custom follow-focus blimp, Mag-necord with sync head, WE mike, boom and other professional gear. No rebuilt or amateur equipment. Also 1952 Ranch Wagon. Reasonable. Consider relocation. HOWARD CAGLE, 14 East 64th St., New York.

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NATURAL COLOR SLIDES, Scenic, National Parks, Cities, Animals, Flowers, etc. Set of eight \$1.95. Sample & List 25c. SLIDES — Box 206, La Habra, California.

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WHAT'S NEW

(Continued from Page 184)

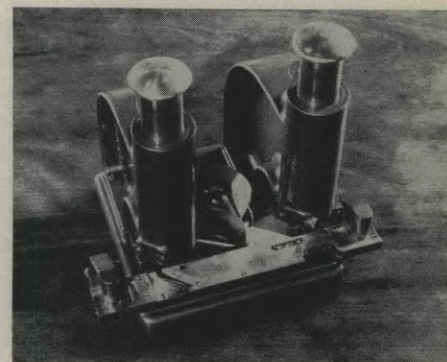
pex magnetic tape recorder. Addition of the Ampex line enables Kinevox to service requirements of those who need a tape recorder as well as synchronized magnetic film equipment.

Film Exposure Data—Carl Zeiss, Inc., 485 Fifth Avenue, New York 17, N.Y. has published a new, up-to-date listing of the more popular black-and-white and color film ASA exposure ratings in handy booklet form.

This guide is now being furnished with each new Zeiss Ikon Ikophot II-A photoelectric exposure meter, as well as all new Zeiss Ikon Contax III-A, Contessa 35 and Super Ikonta BX cameras (which have built-in ASA-calibrated exposure meters).

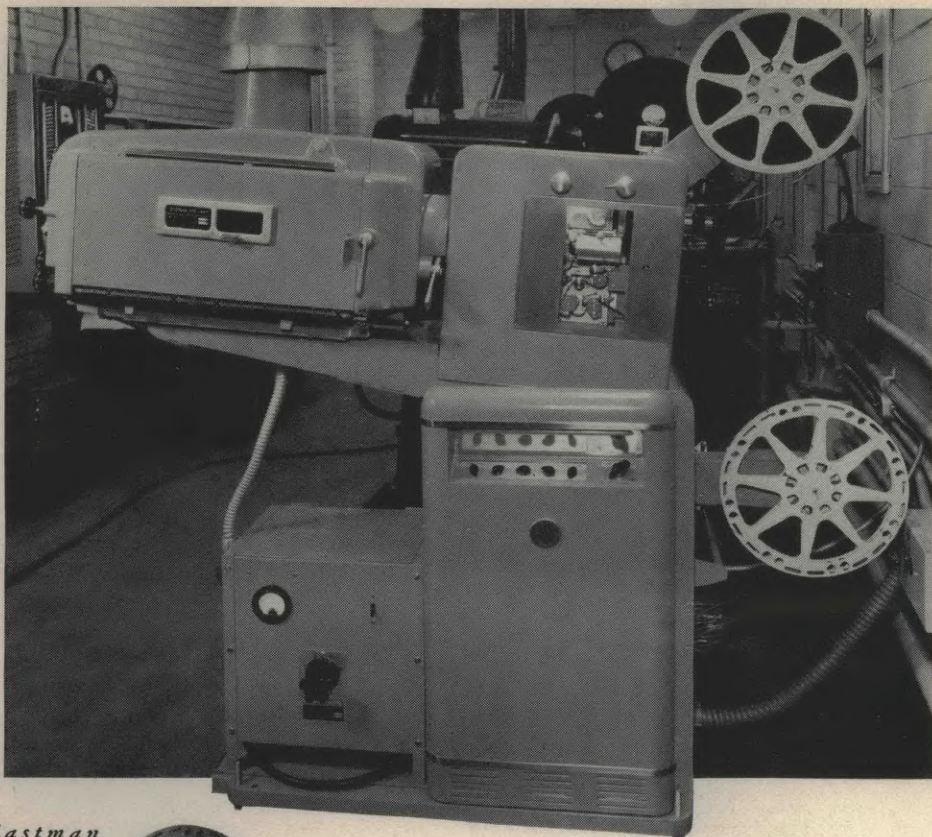
Magnetic Sound Advice—"Tips On Making Your Own Magnetic Sound Movies" is title of latest "How To Do It" booklet offered by Bell & Howell Company, Chicago, Ill. All the information necessary for the amateur wishing to add magnetic sound to his 16mm films is contained in

booklet. Copies may be had at camera stores or by writing to the company direct, 7100 McCormick Road, Chicago.



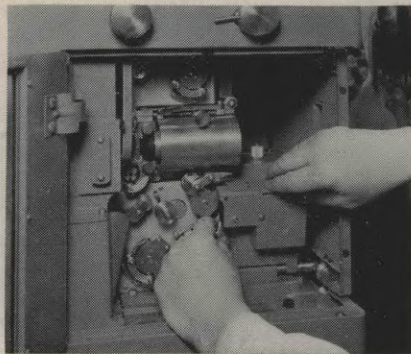
Magnetic Film Splicer—The Bob Jones University, Greenville, So. Carolina, announces it is marketing a new splicer for magnetic film developed by one of the University's affiliates.

Designed especially for magnetic film in accordance with existing standards, one side of the machine provides cutting the film for butt splices, while the other side lines up the film for accurate registration. Splicer may be had for either 16mm double or single perforated film.

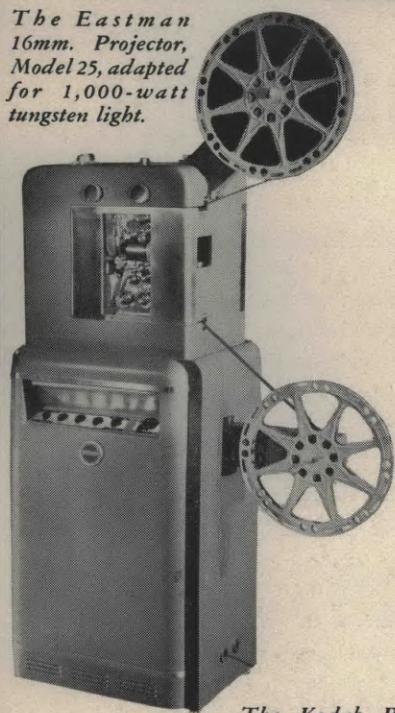


Left, the Eastman 16mm. Projector, Model 25, brings 16mm. projection to the professional level. Shown here, adapted for arc illumination, permanently installed alongside 35mm. equipment.

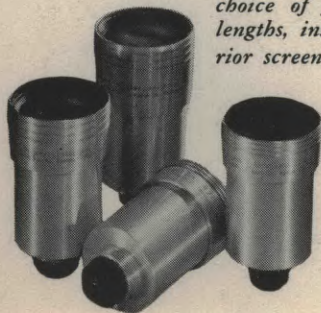
Below, working parts of the film movement mechanism are in constant view of the operator... readily accessible for threading and cleaning.



The Eastman 16mm. Projector, Model 25, adapted for 1,000-watt tungsten light.



The Kodak Projection Ektar Lens, in a choice of four focal lengths, insures superior screen image.



For Professional Quality Sound Projection from 16mm. Film

The Eastman 16mm. Projector, Model 25

This projection instrument—built to a new design concept—eliminates the three major obstacles to theatrical quality 16mm. sound projection... excessive wear and high maintenance cost; low signal-to-noise ratio; and excessive flutter.

A major cause of excessive wear and poor quality sound is the constant transfer of shock forces generated in the film pulldown mechanism to other parts of the system. In the Eastman 16mm. Projector, Model 25, the intermittent (film advance mechanism) is completely isolated and independently driven by its own 1440 r.p.m. synchronous motor. Thus, shock forces are sealed off from the rest of the instrument. The sprocket-shutter system is driven by its own 1800 r.p.m. synchronous motor. Exact phas-

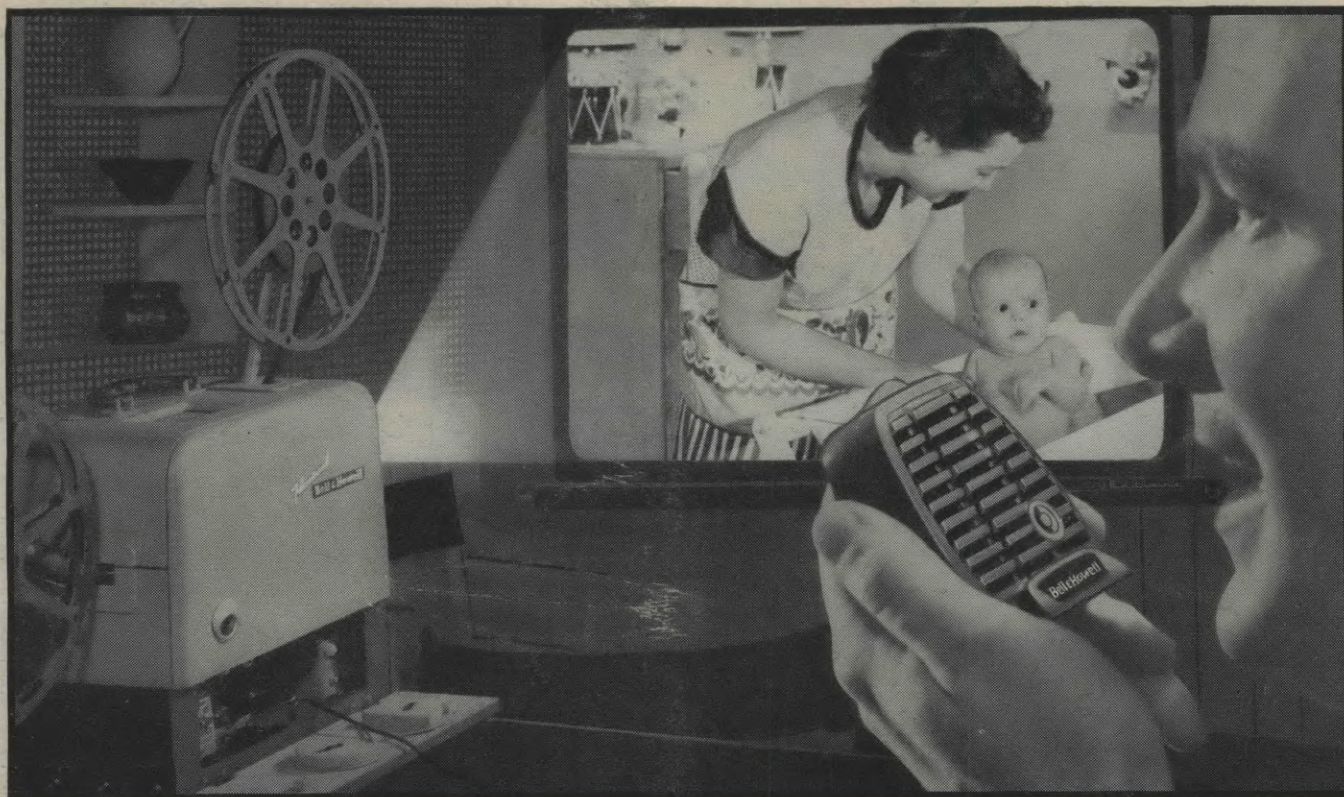
ing between the two systems is accomplished by specially designed synchromesh gears. In addition, the take-up spindle, rewind spindle, and blower are driven by separate motors.

New Sound Optics

A highly corrected microscope objective, adjustable for optimum sound quality from any type of 16mm. sound film, permits reproduction of variable area or variable density 16mm. sound tracks at extremely low distortion and a maximum signal-to-noise ratio.

To get the best out of any 16mm. sound film, project it on an Eastman 16mm. Projector, Model 25. For information on installation, availability, and prices, write directly to...

EASTMAN KODAK COMPANY, ROCHESTER 4, N. Y.



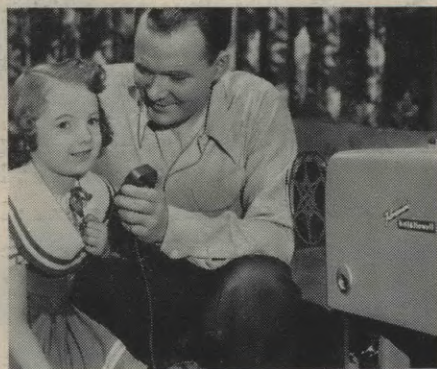
Now you can make low-cost sound movies

Now Bell & Howell brings the making of sound movies within *your* reach. Here is the new 16mm Filmosound 202 — not just a sound movie projector — not just a magnetic sound recorder — but a combination of both for making and showing sound movies. You need no expert knowledge, no costly professional equipment.

With the Filmosound 202, narration and sound effects to accompany the film can be recorded just the way you

want them . . . while all details are fresh in your mind. Changes in the sound can be made when and as often as you want them. Only with magnetic sound movies is this possible at but the cost of the film and SOUNDSTRIPE.

Now you can add sound to old silent films . . . new sound to a film with an obsolete sound track. Use coupon for full details on magnetic sound movies and the new Filmosound 202. Or see your Bell & Howell dealer today!



Record voice and sound effects, and mix voice with musical background, as picture is projected. All recording errors can be easily and quickly corrected. Magnetic recording will last for life of the film, yet can be changed instantly.



You're ready to project movies with sound immediately after you record. Later, to change the sound, erase and record again in one simple step. Remember, your Filmosound 202 will project any 16mm film, silent or sound.

the sensational, new 16mm

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Guaranteed for life: During the life of the product, any defect in material or workmanship will be remedied free (except transportation).

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7148 McCormick Road, Chicago 45, Illinois

Please send me without cost or obligation full information on making low-cost sound movies with the new Filmosound 202.

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Organization (if any)

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You buy for life

when you buy

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